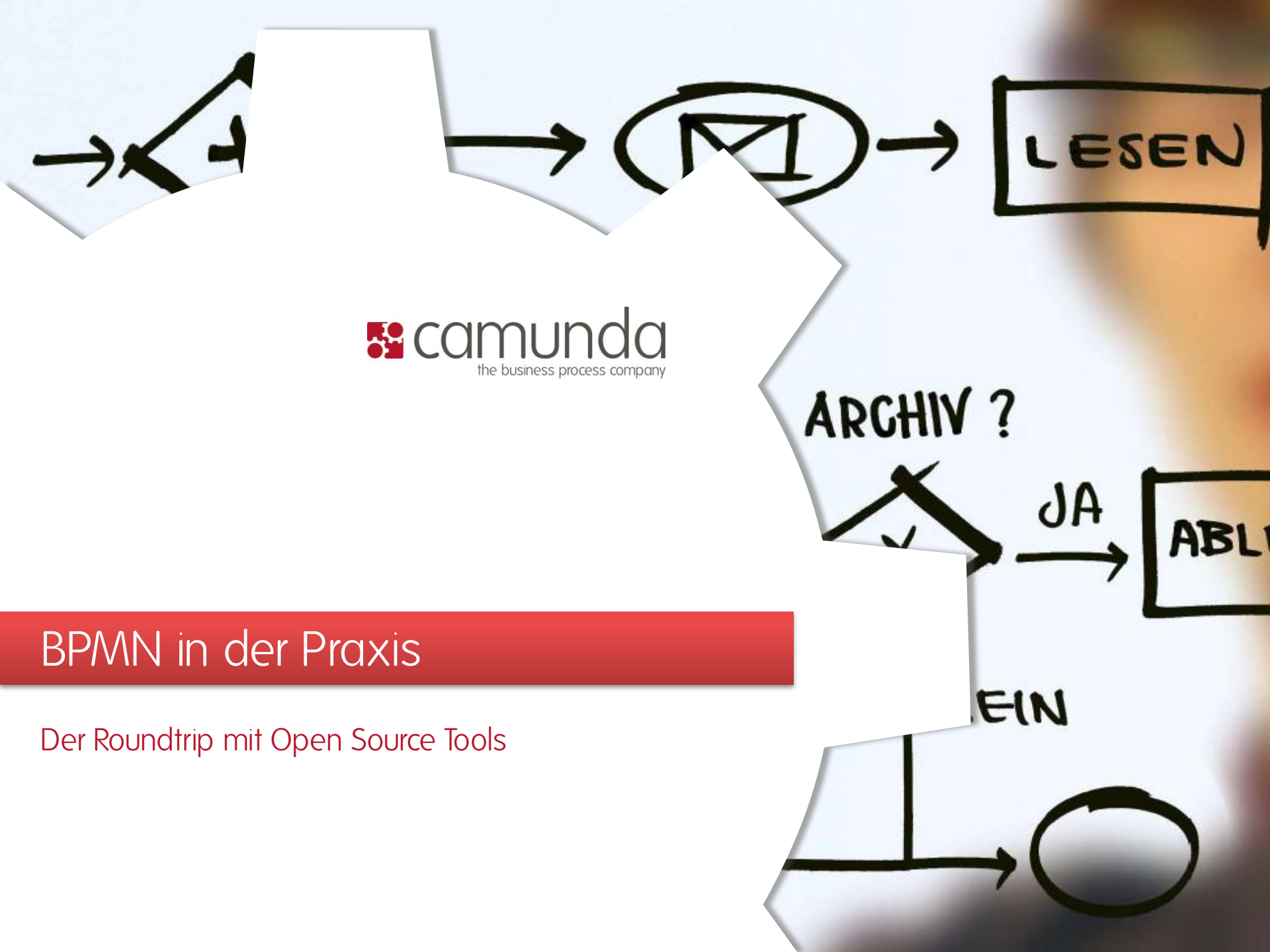

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BPMN in der Praxis

Der Roundtrip mit Open Source Tools

Werdegang der BPMN

bis 2002	Entwicklung Stephen A. White, IBM	
2002	Veröffentlichung Business Process Management Initiative (BPMI)	
Seit 2005	Übernahme und Weiterentwicklung Object Management Group (OMG)	

Aktueller Stand: BPMN 1.2; In der Entwicklung: BPMN 2.0

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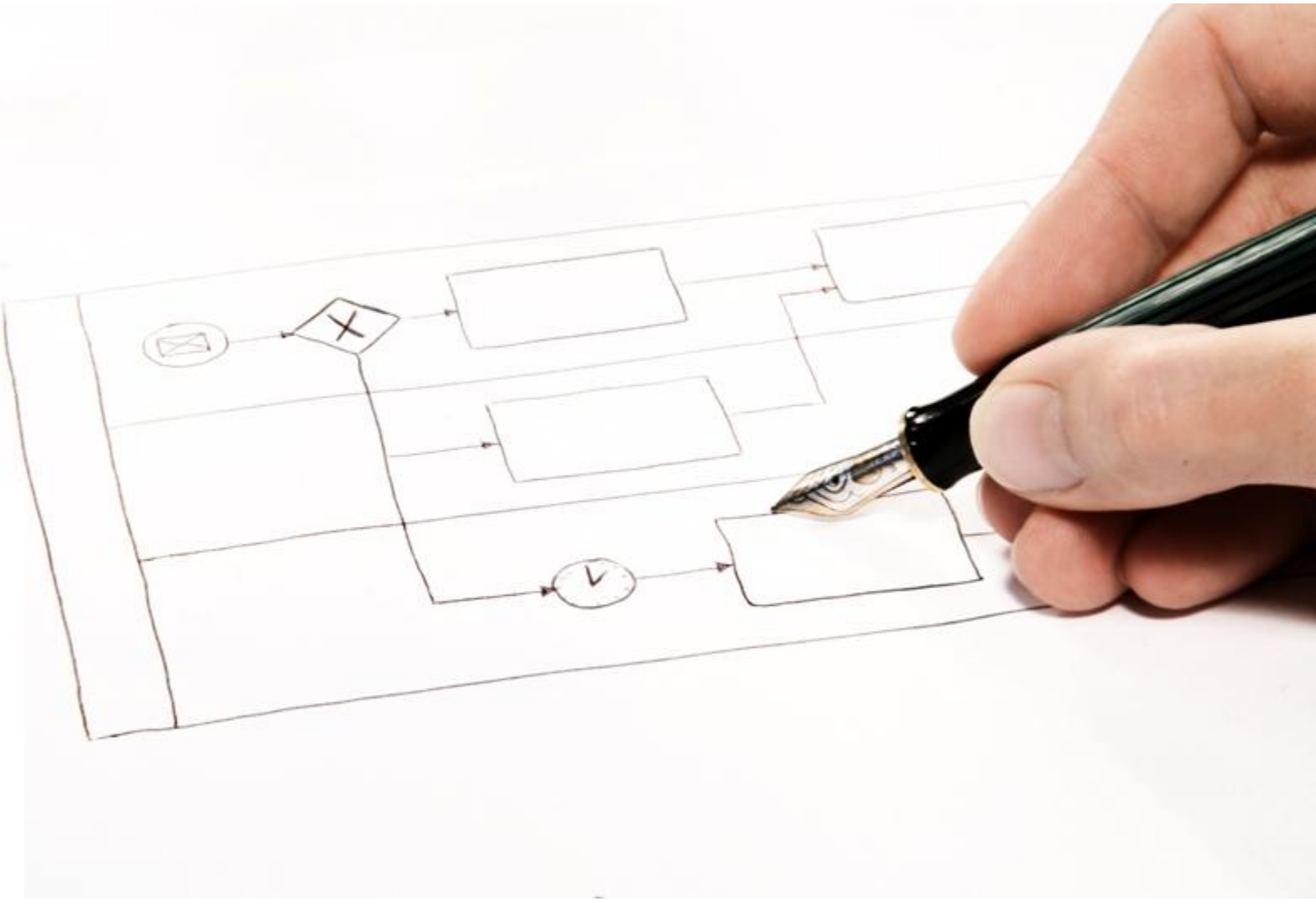
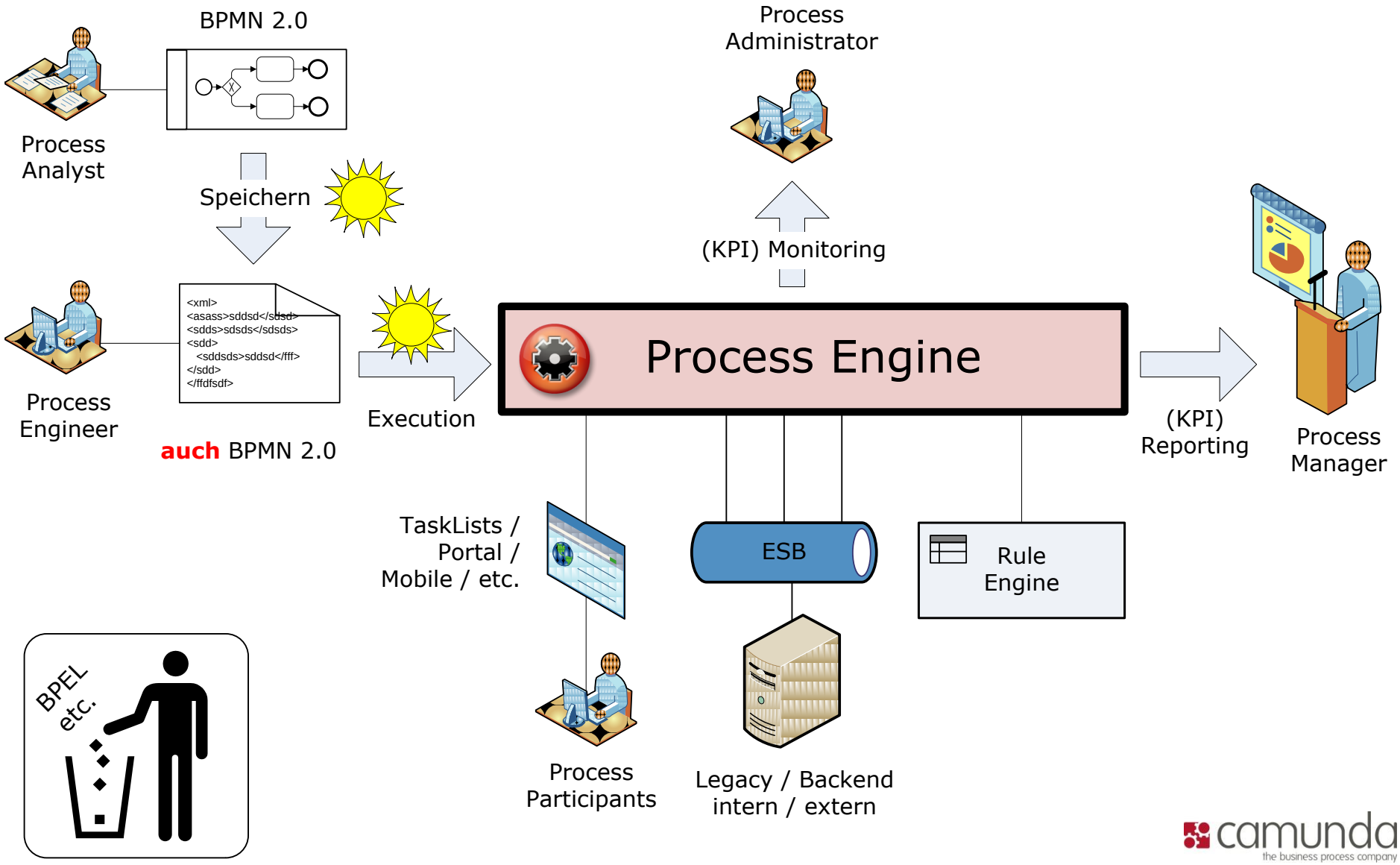
BPMN 2.0, Status & die Finalization Task Force (FTF)

Warum wollen alle BPMN 2.0?



Typische BPM-Architektur mit BPMN 2.0



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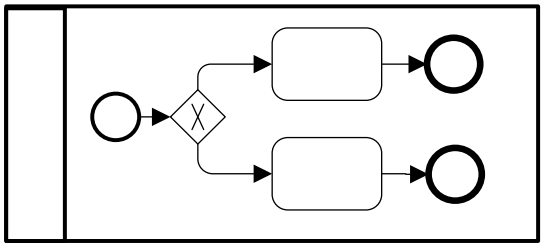
Was macht eine „Prozess-Anwendung" aus?

„BPM Suite"

„Zero Code!"

Prozess-Anwendung



Ausführbares Prozessmodell

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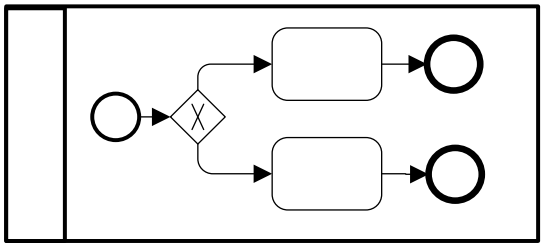
Oder doch viel mehr?

BPM Suite?

Zero Code?

Prozess-Anwendung

- Benutzeroberflächen
- Schnittstellen
- Geschäftslogik
- Datenhaltung
- Business Rules
- Nicht funktionale Anforderungen
- …



Ausführbares Prozessmodell

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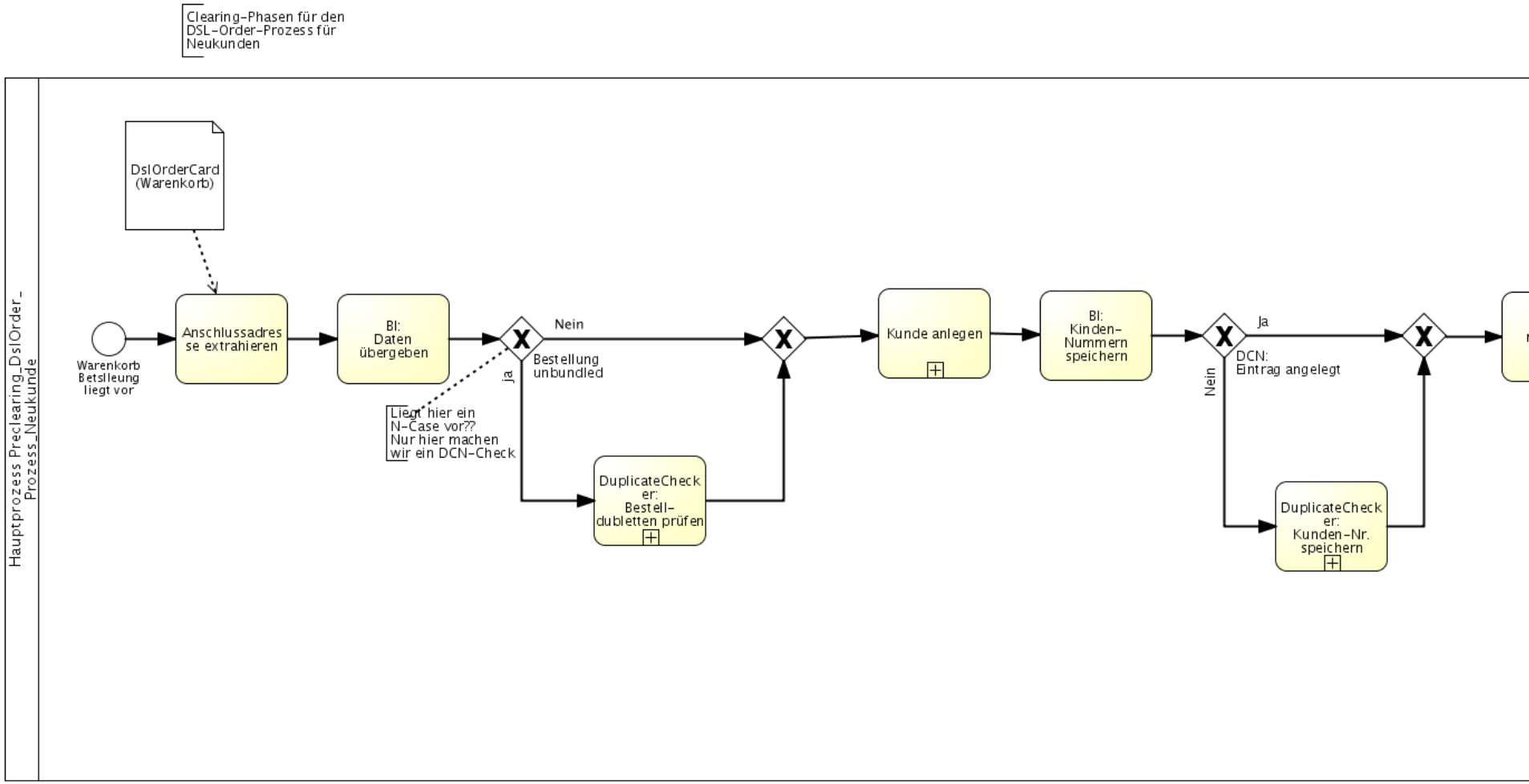
Beispielprojekt mit Karte und Kompass

Erster Prozess im Bereich mit unternehmensweiter SOA-Plattform
Verbesserungen SOA-Plattform notwendig

Der Prozess mit Pilotcharakter: DSL-Neukundenbestellung



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Technische Umgebung

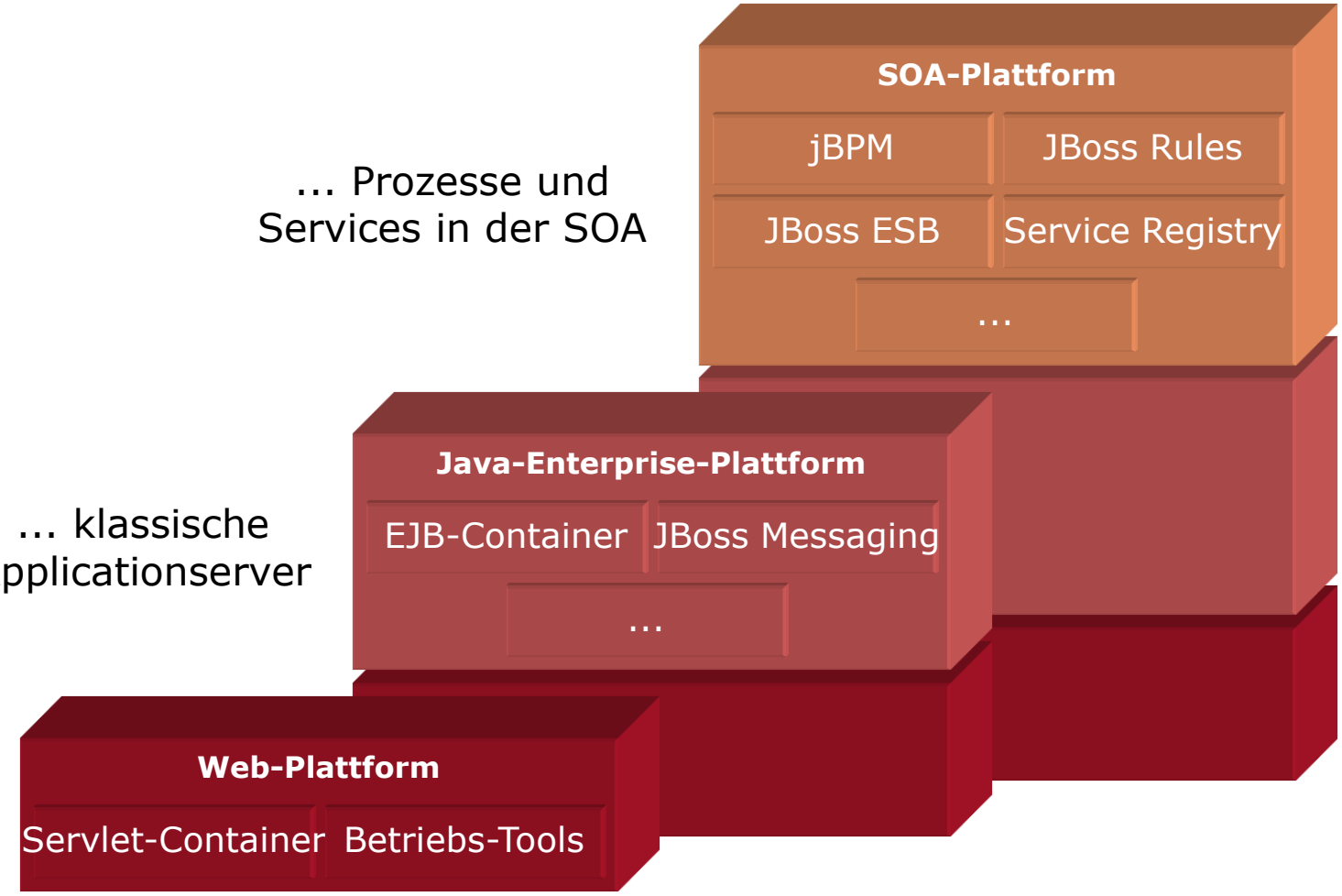
JBoss by Red Hat

Ausbaustufen für...

... Prozesse und Services in der SOA

... klassische Applicationserver

... Web-Applikationen



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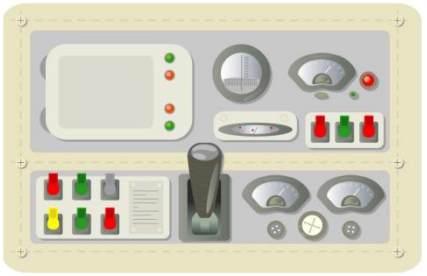
Und die Teams?

Passt also die Magic BPM Suite?

Modelling

Monitoring



Business

IT

Magic BPM-Suite

Human Workflow

EAI / SOA

Warum trotzdem BPMN 2.0?

Transparency

Business

Process Forward Engineering

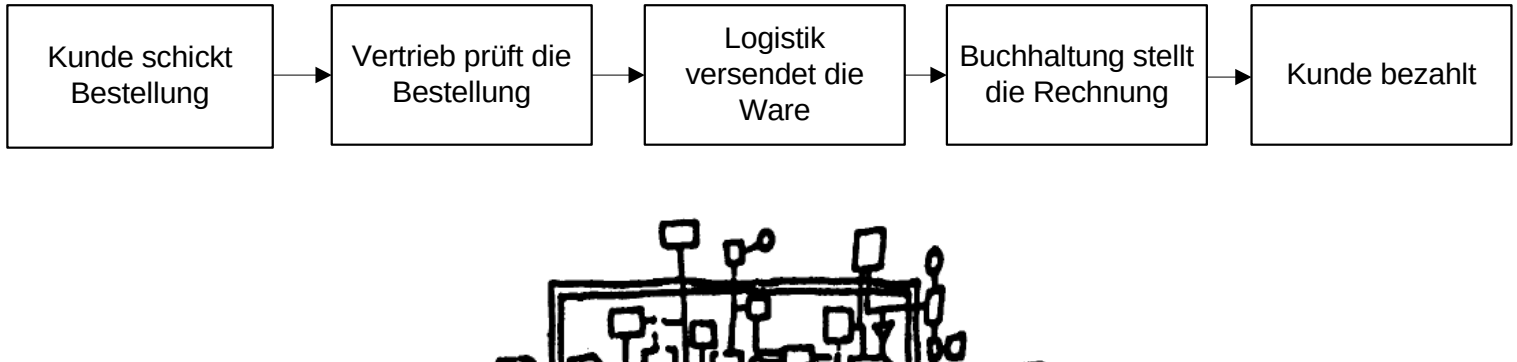
Process Reverse Engineering

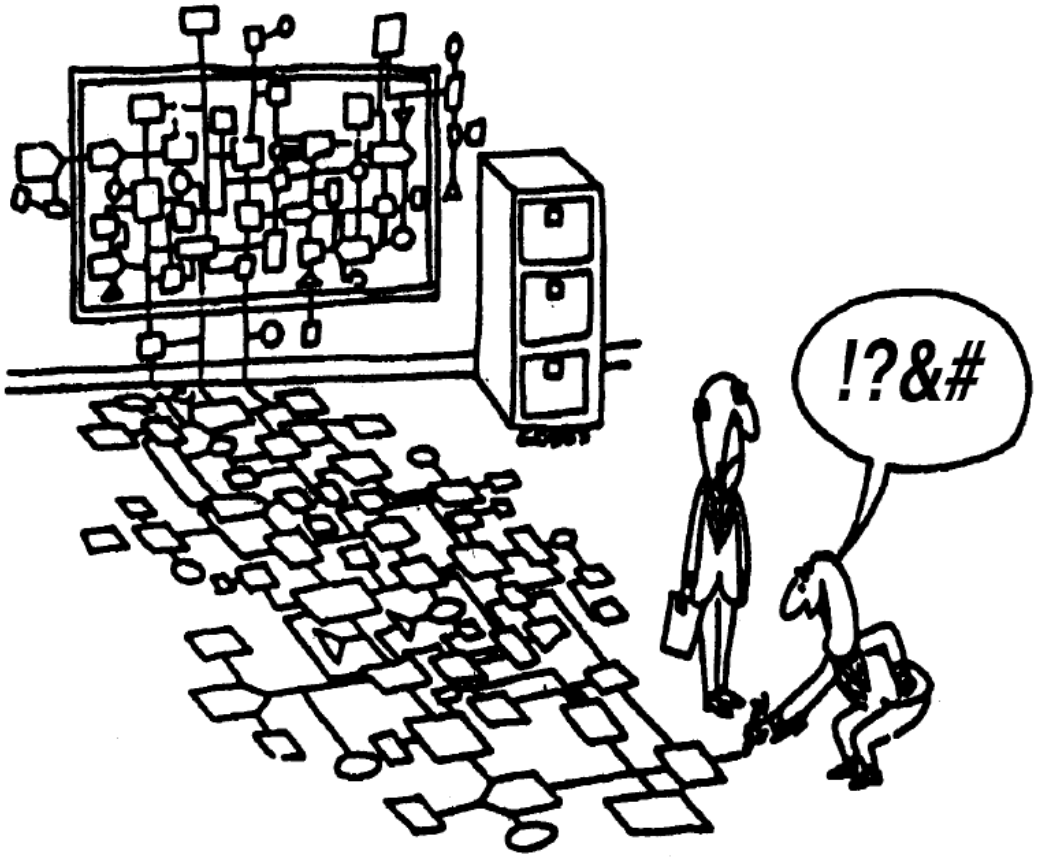
Process Centric Development

Process Monitoring / Reporting

IT

Ein Modell für alle?





Prozessmodelle: Verschiedene Zwecke und Zielgruppen!

Process **Owner**

Vorstand, Bereichsleiter

Prozess-landschaft

Process **Manager**

Abteilungs-, Teamleiter

Prozess im Überblick

Process **Participant**

Sachbearbeiter

„Eigene" Prozessteile

Process **Analyst**

(Inhouse) Consultant

Alles

Process **Engineer**

Softwareentwickler

Technische Umsetzung

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Die einzige Lösung: Ein Prozess – Viele Modelle

Owner

Prozessmodell

Manager

Prozessmodell

Participant

Prozessmodell

Analyst

Prozessmodell

Engineer

Prozessmodell

Prozess-Realität

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camunda BPMN-Framework

Prozesslandschaft

Ebene 1
Strategisches Prozessmodell

Inhalt: Prozess im Überblick
Ziel: Schnelles Verständnis

Ebene 2
Operatives Prozessmodell

Inhalt: Operative Abläufe
Ziel: Arbeits- und Umsetzungsgrundlage

Fachlich (Business)

Technisch (IT)

Ebene 3a
Technisches Prozessmodell

Ebene 3b
IT-Spezifikation

Mit Process Engine

Ebene 4b
Implementierung

Ohne Process Engine

Inhalt: Technische Details
Ziel: Umsetzung

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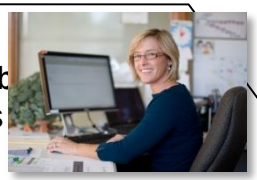
camunda BPMN-Framework

Prozesslandschaft

Ebene 1
Strategisches Prozessmodell

Inhalt: Prozess im Überblick
Ziel: Schnelles Verständnis



Eb
Operatives

Inhalt: Operative Abläufe
Ziel: Arbeits- und Umsetzungsgrundlage

Fachlich (Business)

Technisch (IT)

Ebene 3a
Technisches Prozessm

Ebene 3b
pezifikation

Mit Process Engine

Inhalt: Technische Details
Ziel: Umsetzung

Ebene 4b
Implementierung

Ohne Process Engine

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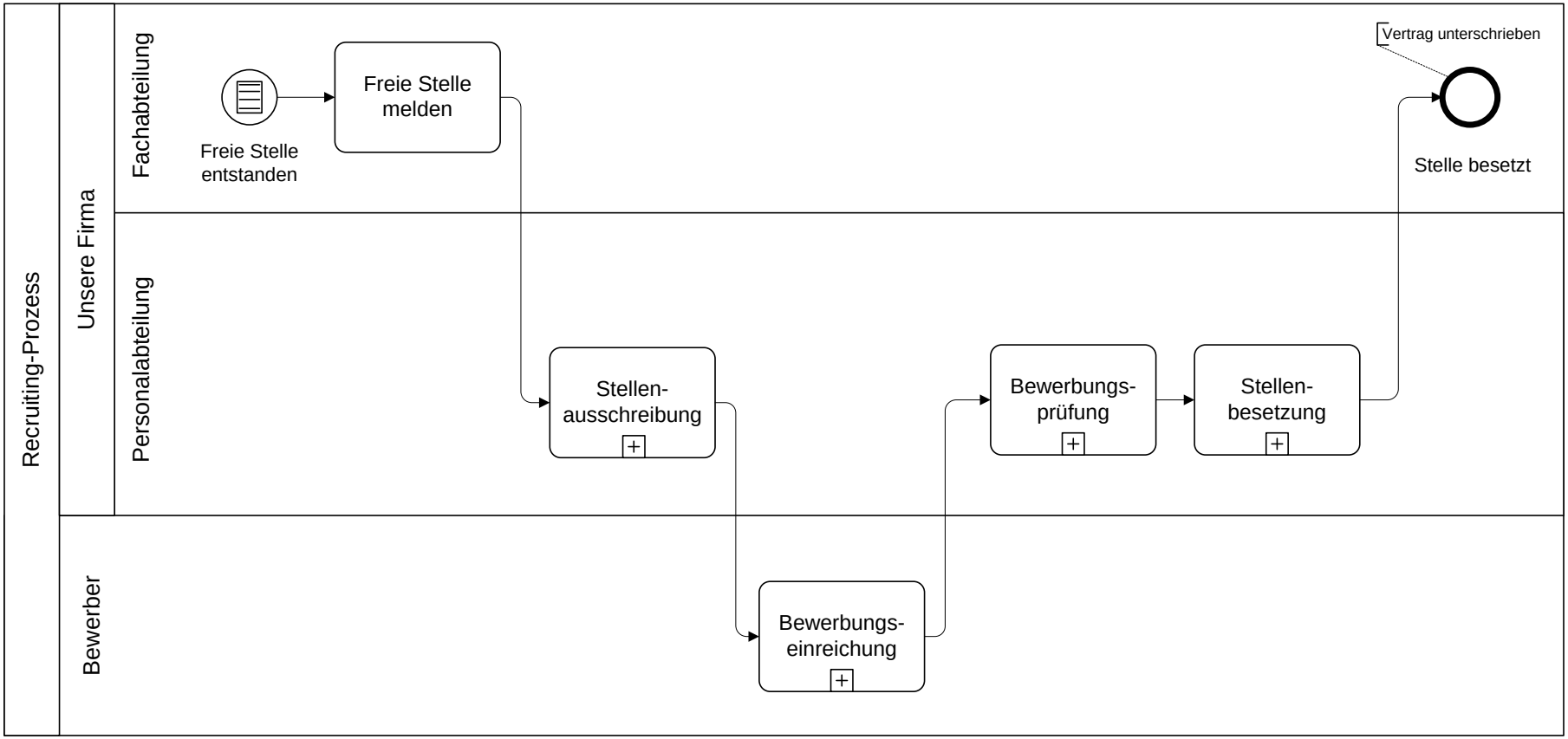
Ein Beispiel: Der „Recruiting-Prozess"



Ebene 1

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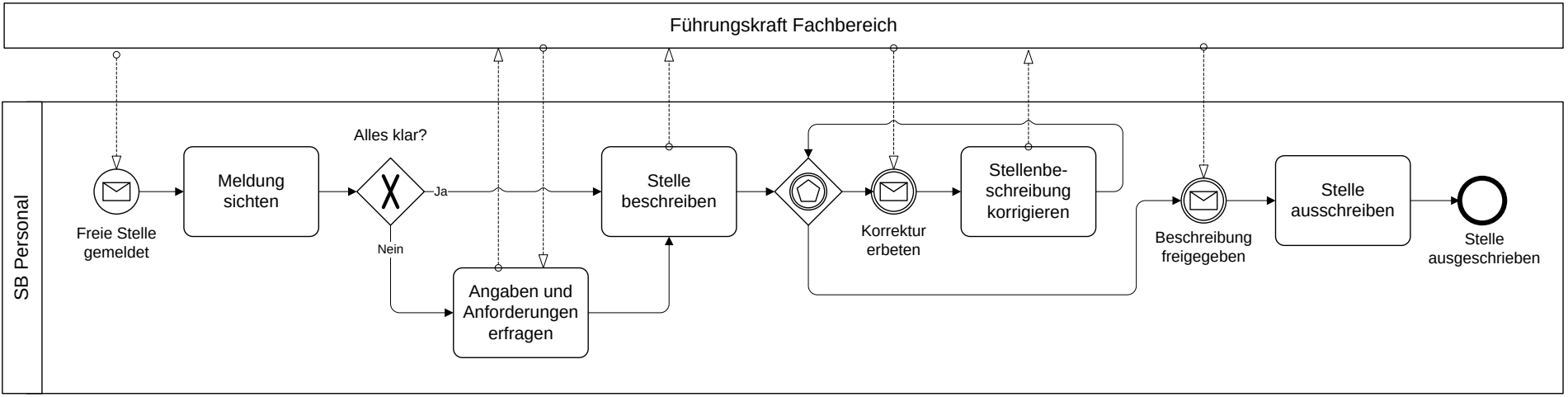
Die Stellenausschreibung aus Sicht des SB Personal



SB Personal
Process Participant

Ebene 2

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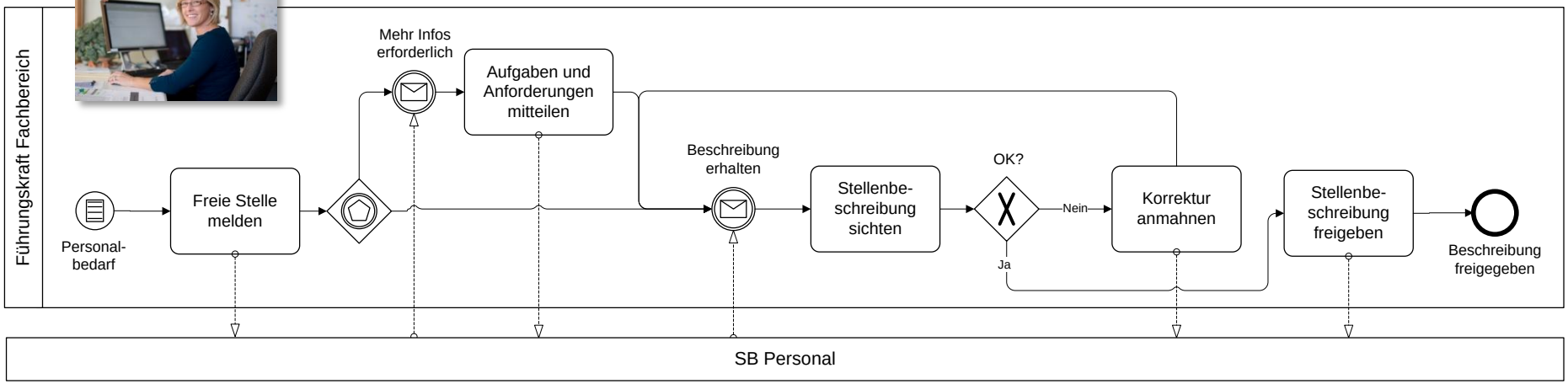
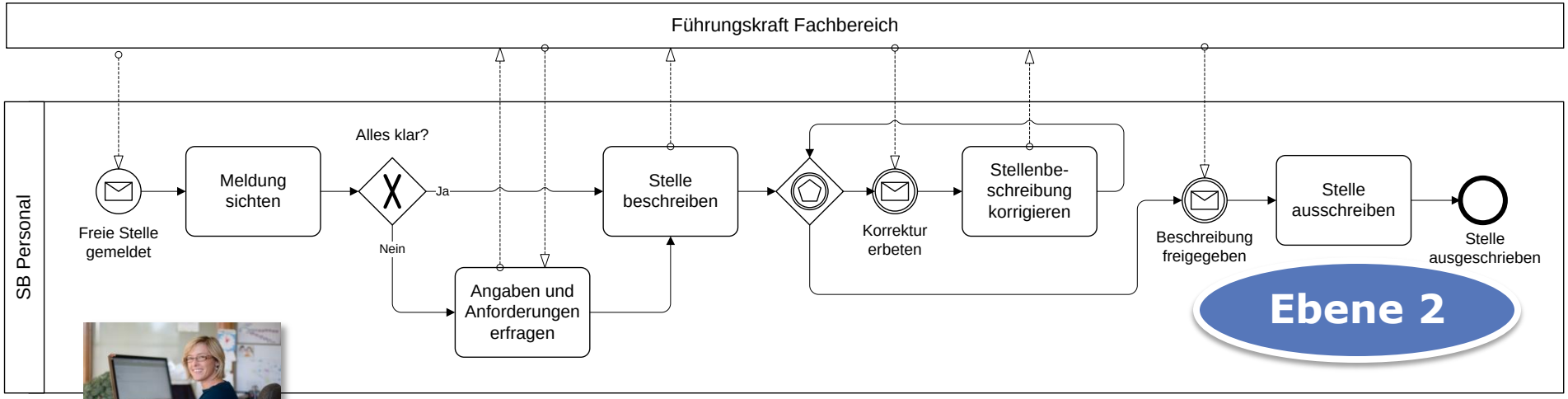
Die Stellenausschreibung aus zwei Perspektiven...





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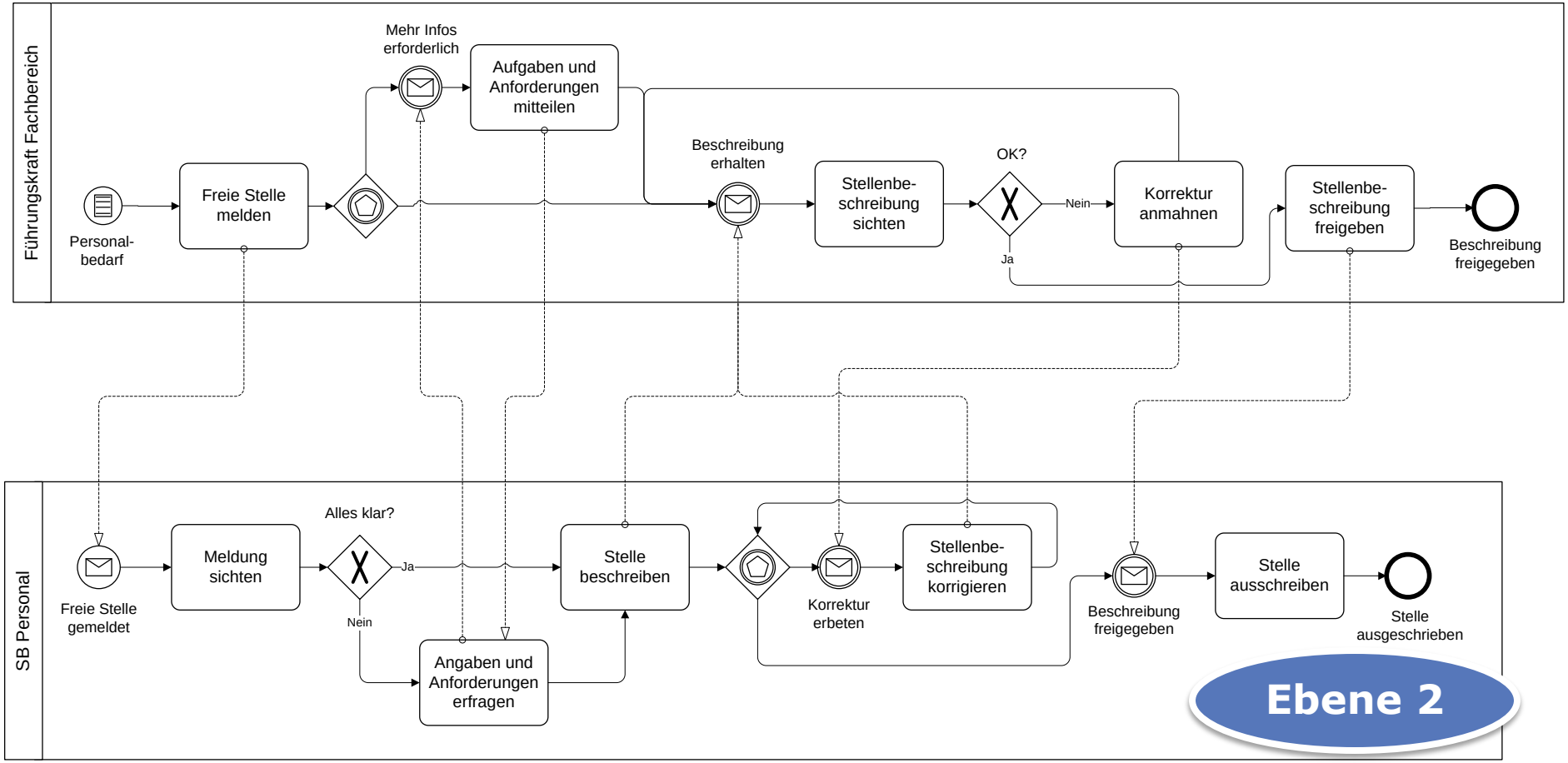
Die Stellenausschreibung aus der Vogelperspektive



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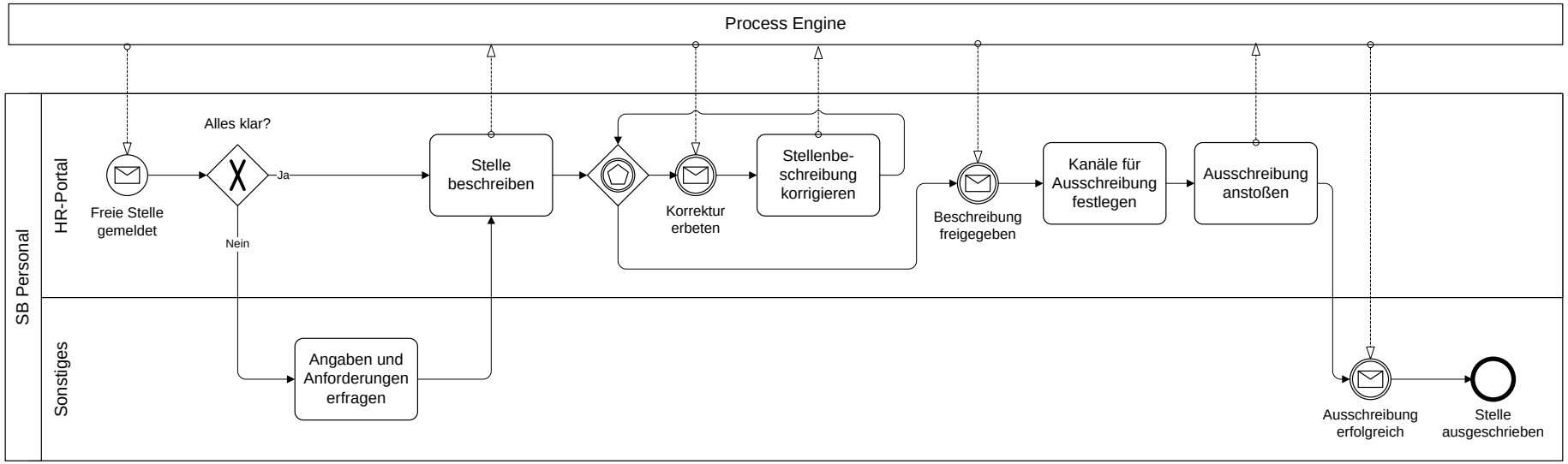
Die BPM-Lösung aus Sicht des SB Personal



SB Personal
Process Participant

Ebene 2-3

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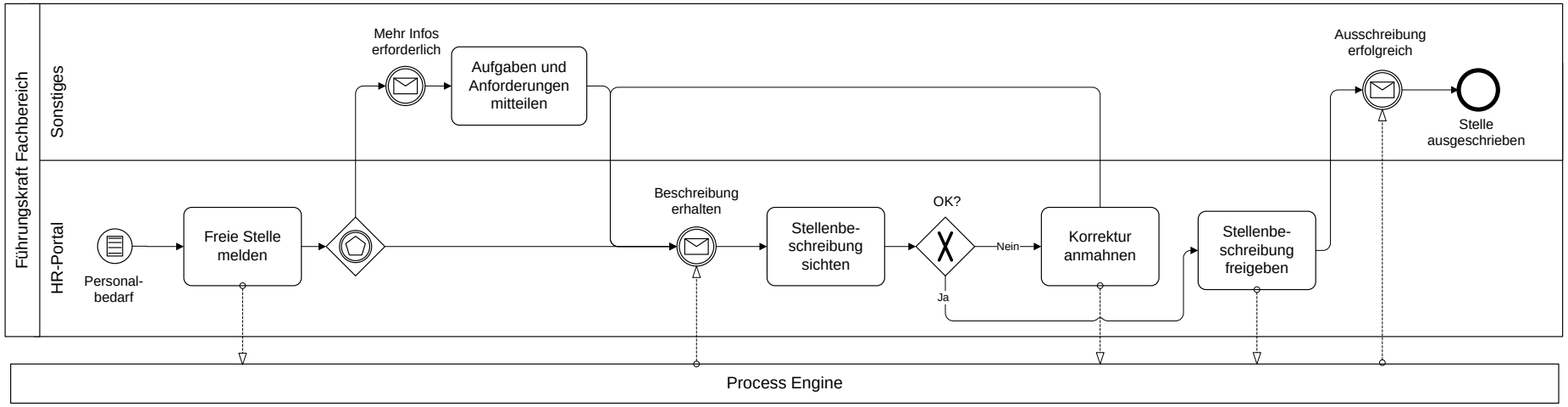
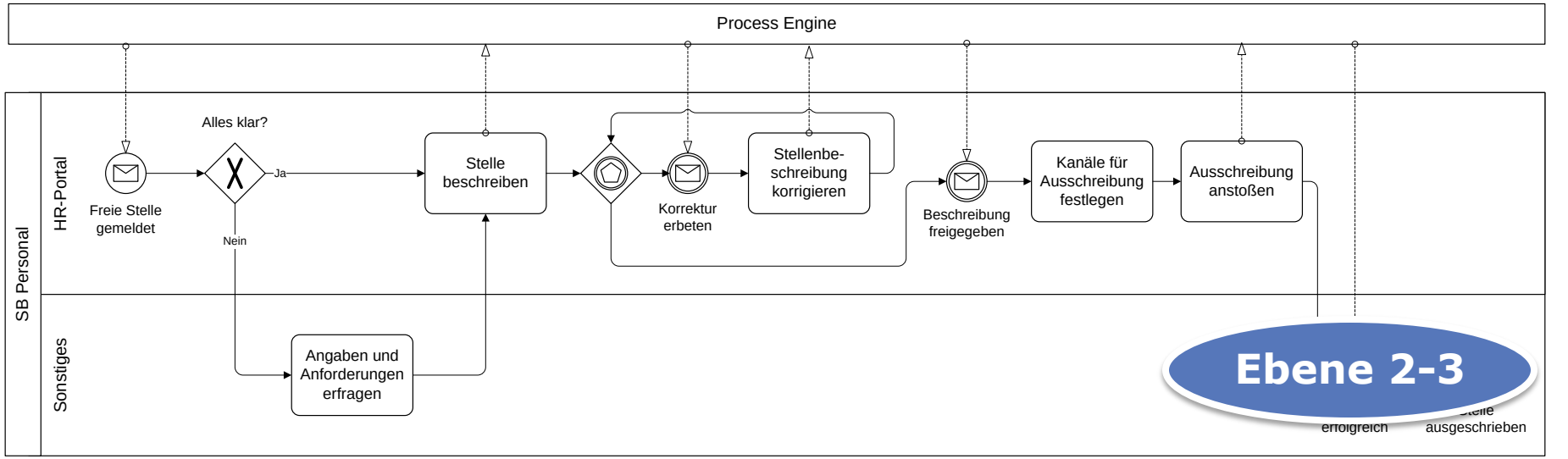
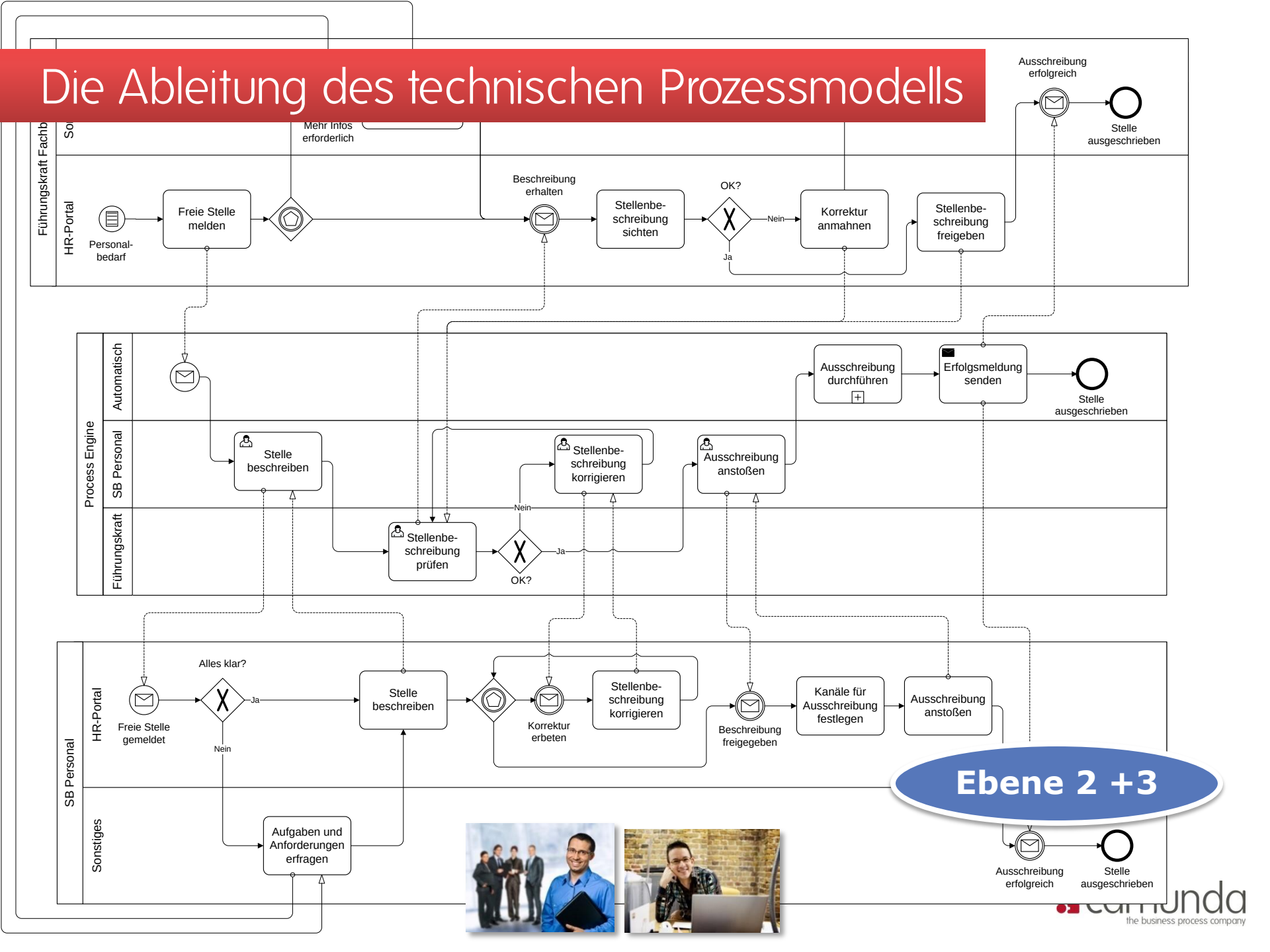
Aus Sicht beider Participants





Die Ableitung des technischen Prozessmodells



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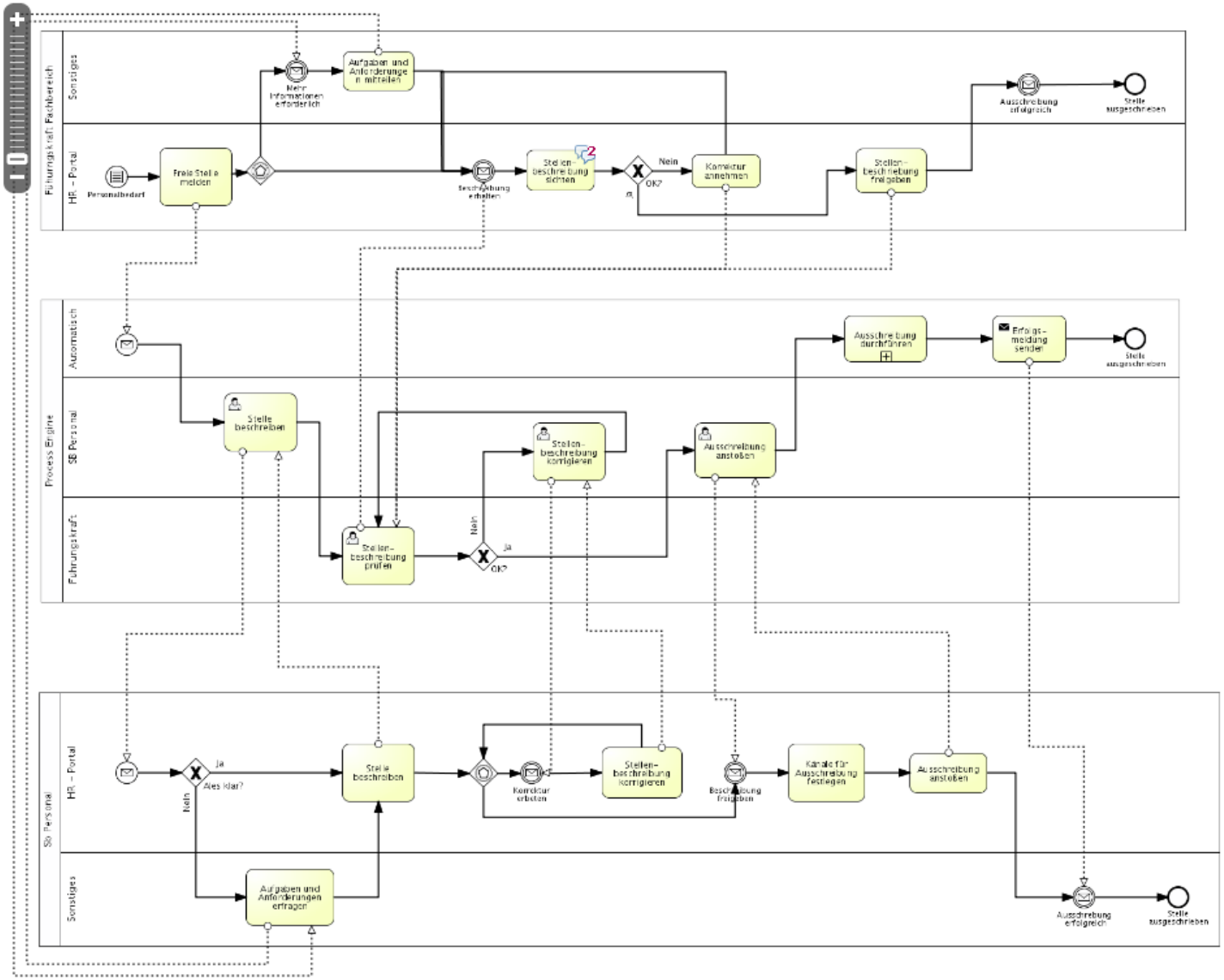
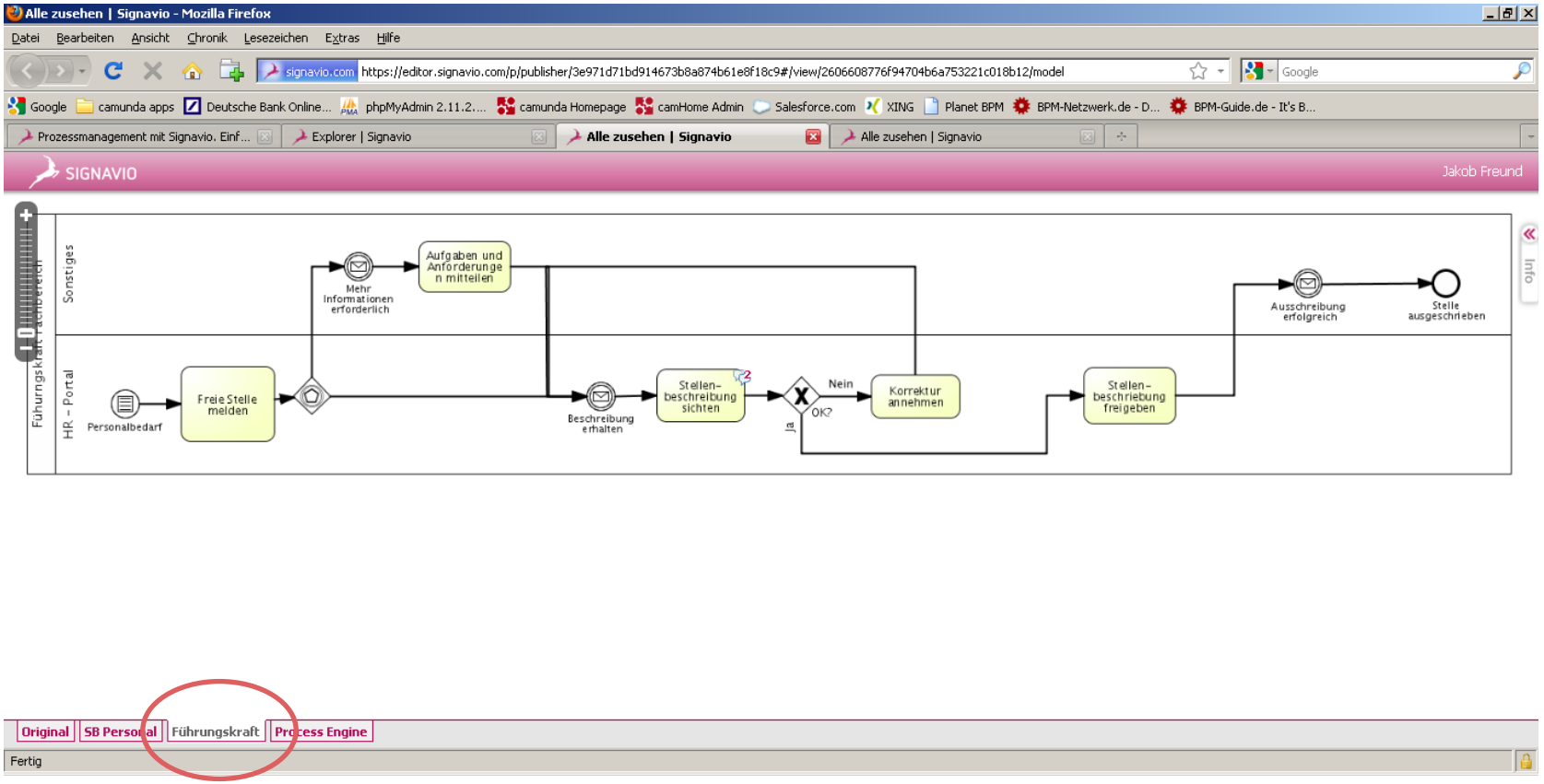
Tooling-Beispiel: Das gesamte BPD im Signavio Process Editor



Original | SB Personal | Führungskraft | Process Engine

Perspektive für die Führungskraft im Fachbereich...



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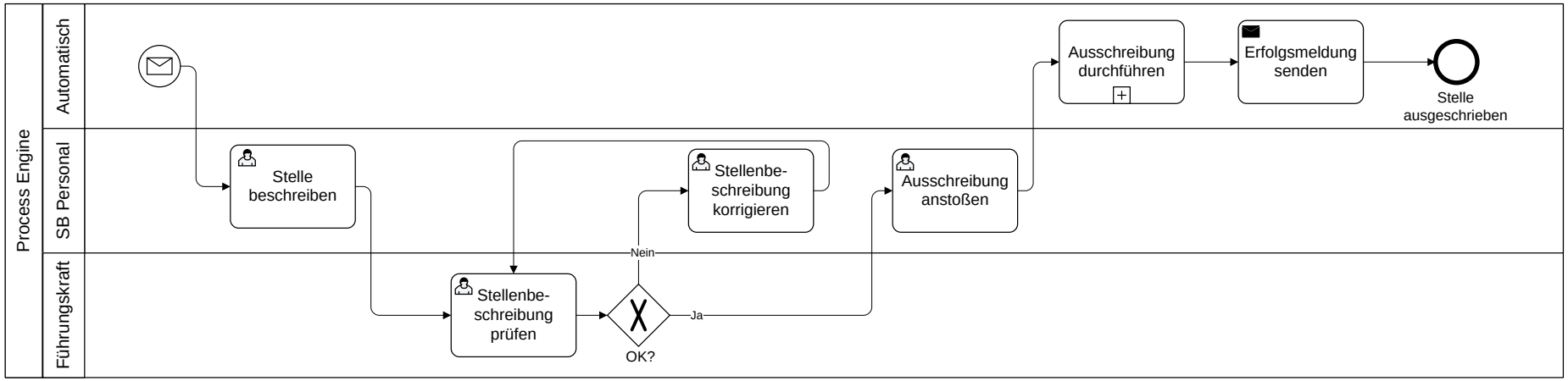
Der Prozess der Process Engine



Developer
Process Engineer

Ebene 3

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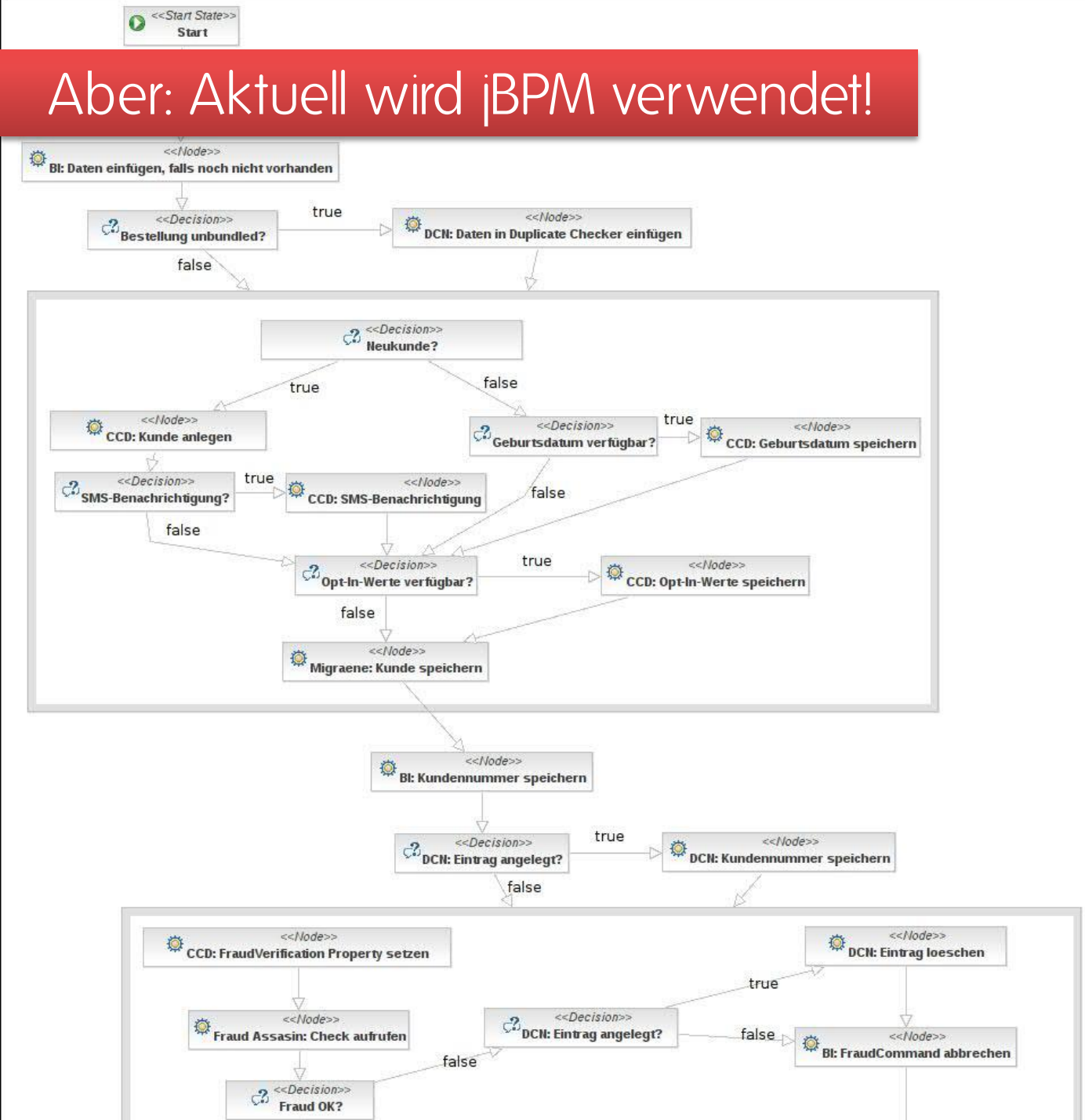
Aber: Aktuell wird jBPM verwendet!



jBPM

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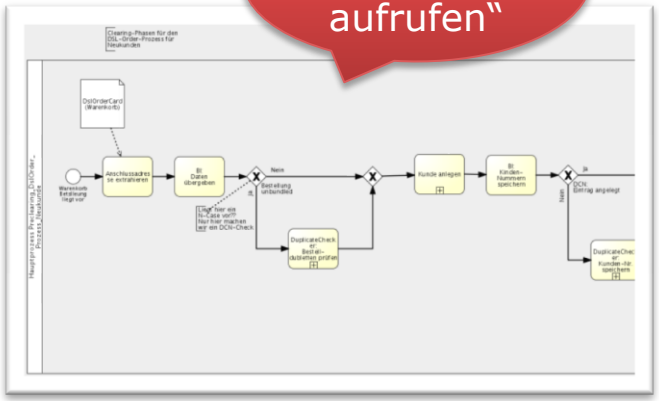
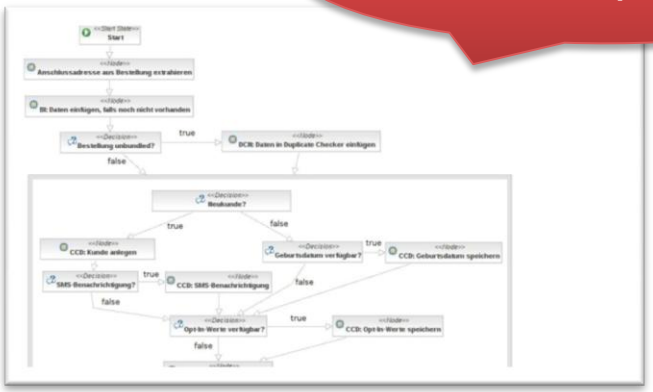
Das heißt es existieren verschiedene Modelle?

„Fraud-Service aufrufen“



??

FraudService.checkFraud(customer)



BPMN-Repository (Signavio)

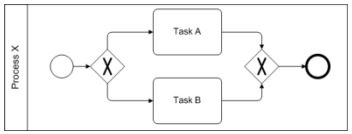
Entwicklungs-Repository (SVN)

Repository in Process Engine

Modell in der Entwicklung

Fachliches Modell

Ablaufendes Modell



Logisches Modell

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Wie kommen die Fraktionen damit zusammen?

Verschiedene Rollen = verschiedene Arbeitsumgebungen

Process Participant

- Eigenen Pool einsehen
- Status Prozessinstanz im eigenen Pool visualisieren
- Verknüpfte Dokumente herunterladen
- ...

Process Analyst

- Prozesse im Überblick
- Verschiedene Sichten auf Prozesse (fachlich, technisch, Detaillierung, …)
- Koordination mit IT
- ...

Process Engineer

- Technische Umsetzung
- Softwareentwicklung
- ...

Der Betrieb

?

- Deployment
- Monitoring & Überwachung
- Eingreifen ein Fehlersituationen
- ...

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Mögliches Vorgehen

Process Analyst

Process Engineer

jBPM

eclipse

Analyst

Fachliches Modell Ebene 2

Engine Pool in Ebene 2 Modell

Überführen Ebene 2 Modell in Grundgerüst Ebene 3

Technische Umsetzung Ebene 3 Prozess

Technische Änderungen fachlich freigeben

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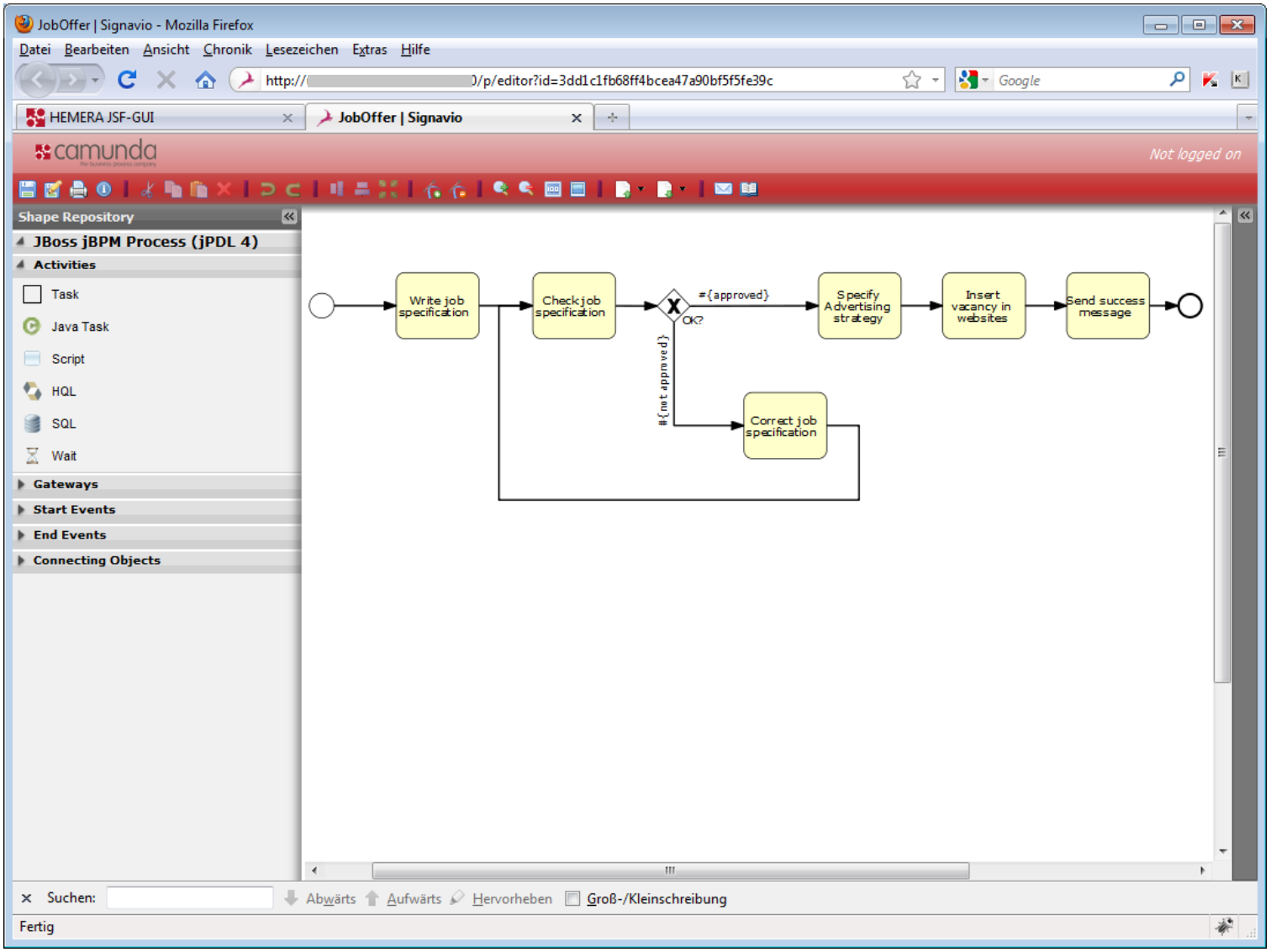
Modeling in Signavio



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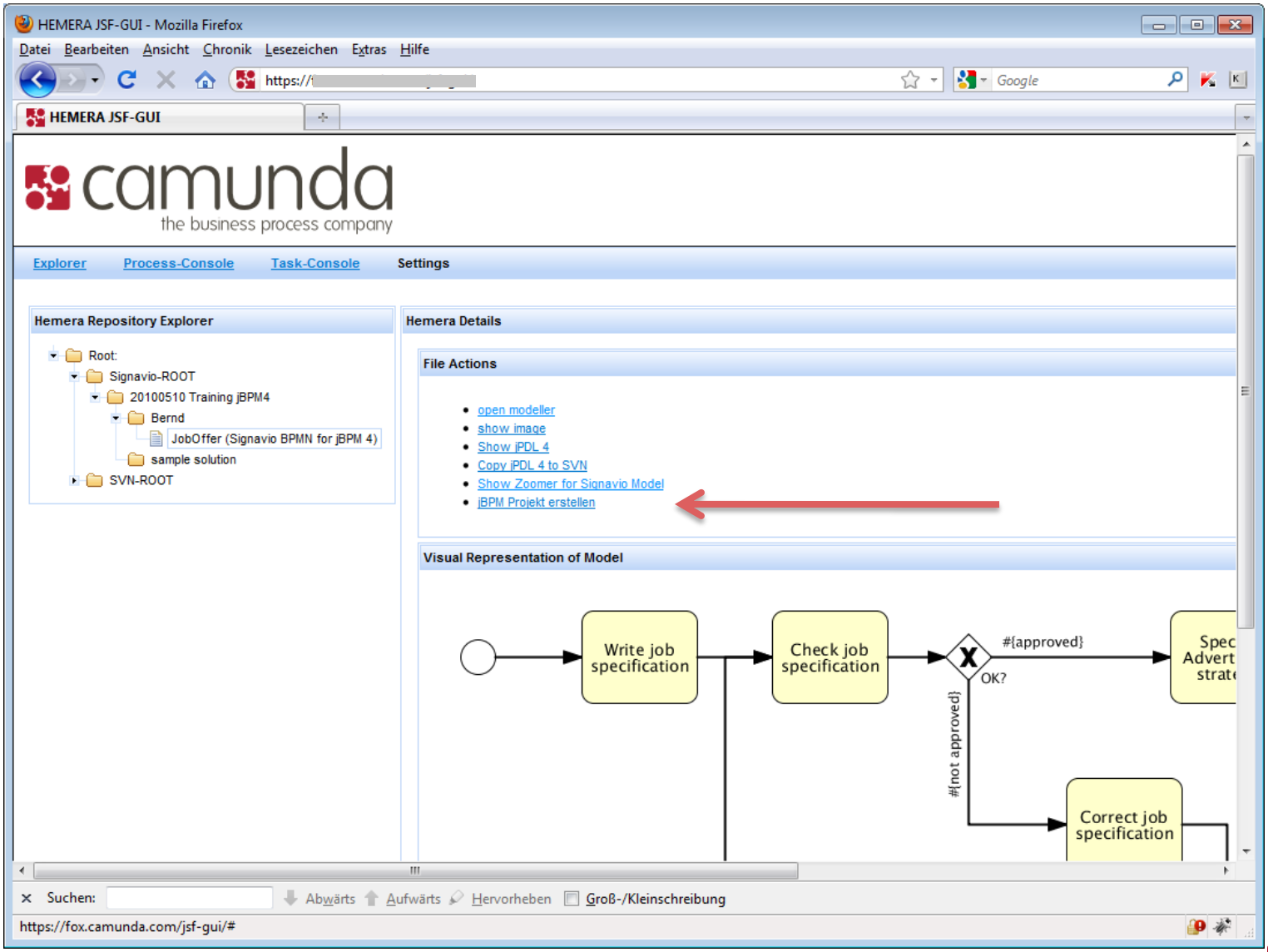
Create development project from Signavio model



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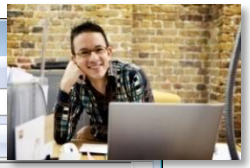
Create development project in SVN



HEMERA JSF-GUI - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen Extras Hilfe

https:/

HEMERA JSF-GUI

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Explorer Process-Console Task-Console Settings

Hemera Repository Explorer

- Root:
  - Signavio-ROOT
    - 20100510 Training jBPM4
      - Bernd
        - JobOffer (Signavio BPMN for jBPM 4)
      - sample solution
  - SVN-ROOT

Hemera Details

File Actions

- open modeller
- show image
- Show jPDL 4
- Copy jPDL 4 to SVN
- Show Zoomer for Signavio Model
- jBPM Projekt erstellen

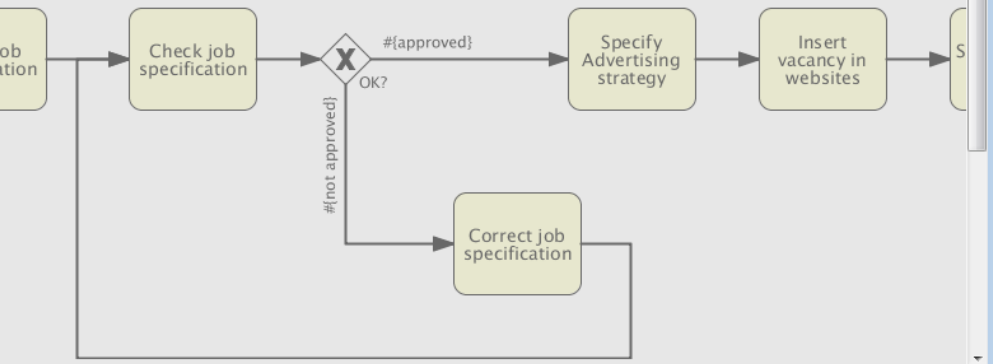
Visual Representation of Model

Action

- Root:
  - Signavio-ROOT
  - SVN-ROOT
    - 20100510_Training_jbpm4
      - bernd

JbpmProject Name: JobOffer

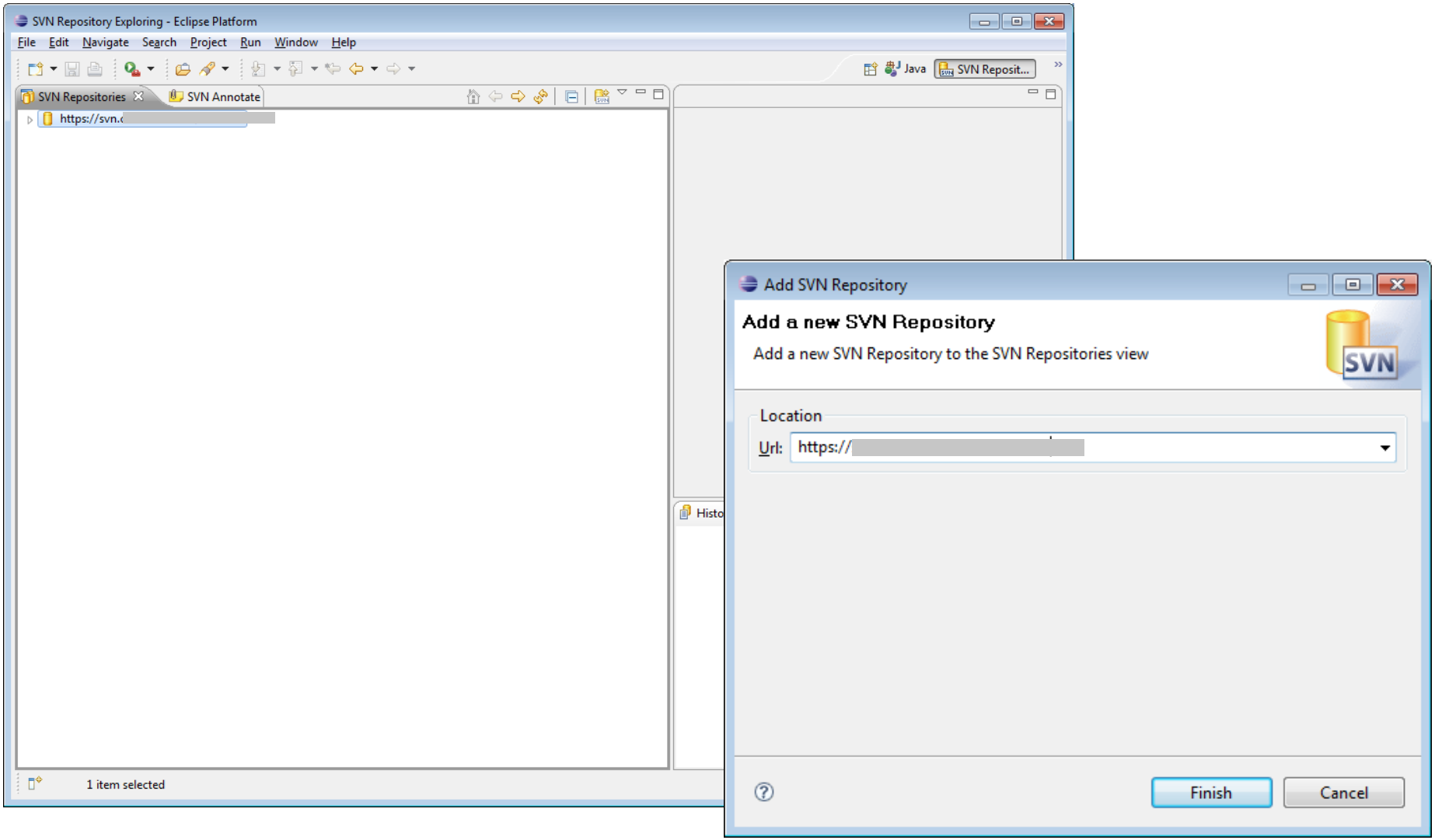
Ok Cancel



Suchen: Abwärts Aufwärts Hervorheben Groß-/Kleinschreibung

Fertig

Check it out from SVN in Eclipse



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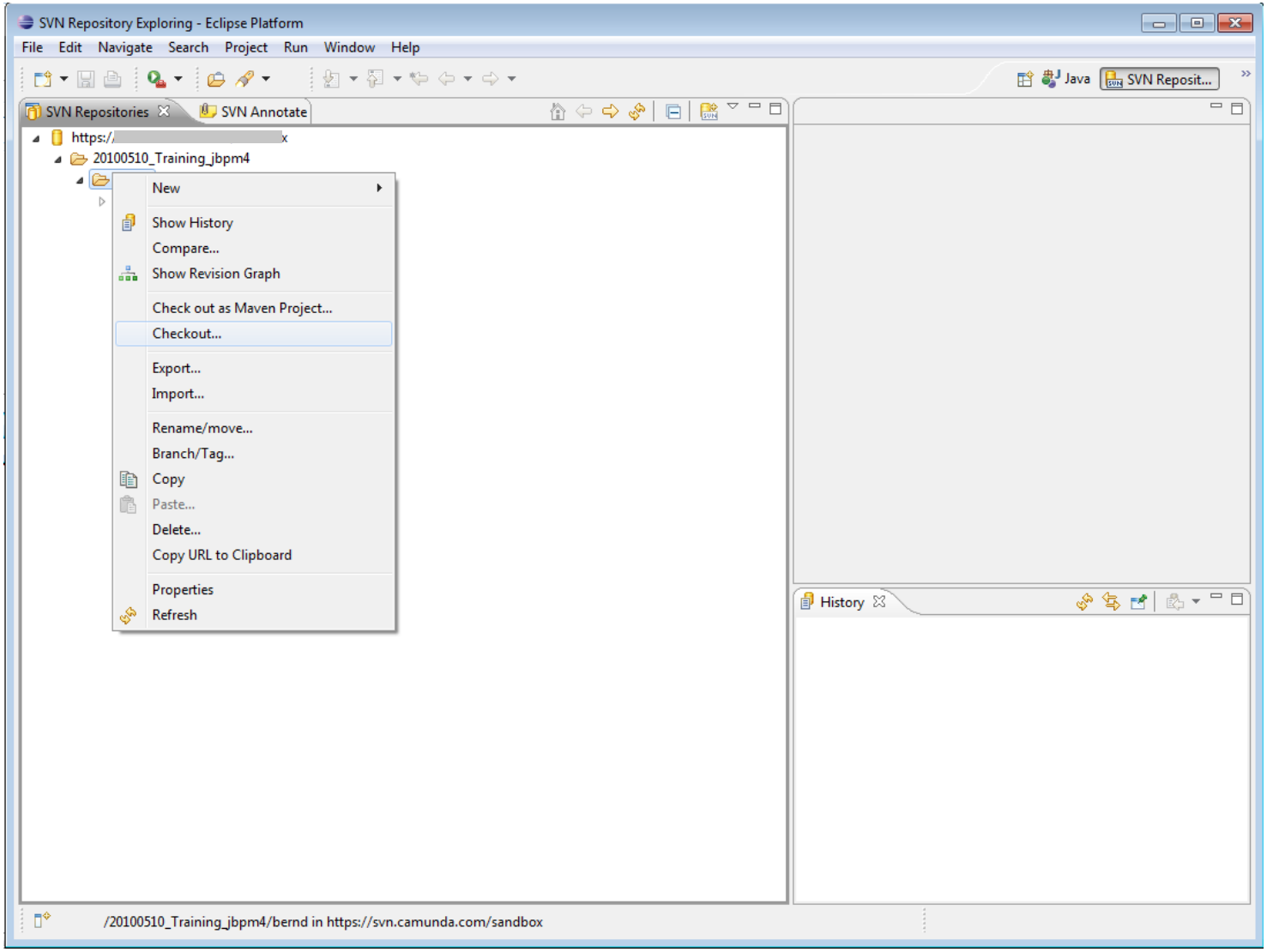
Check it out from SVN in Eclipse



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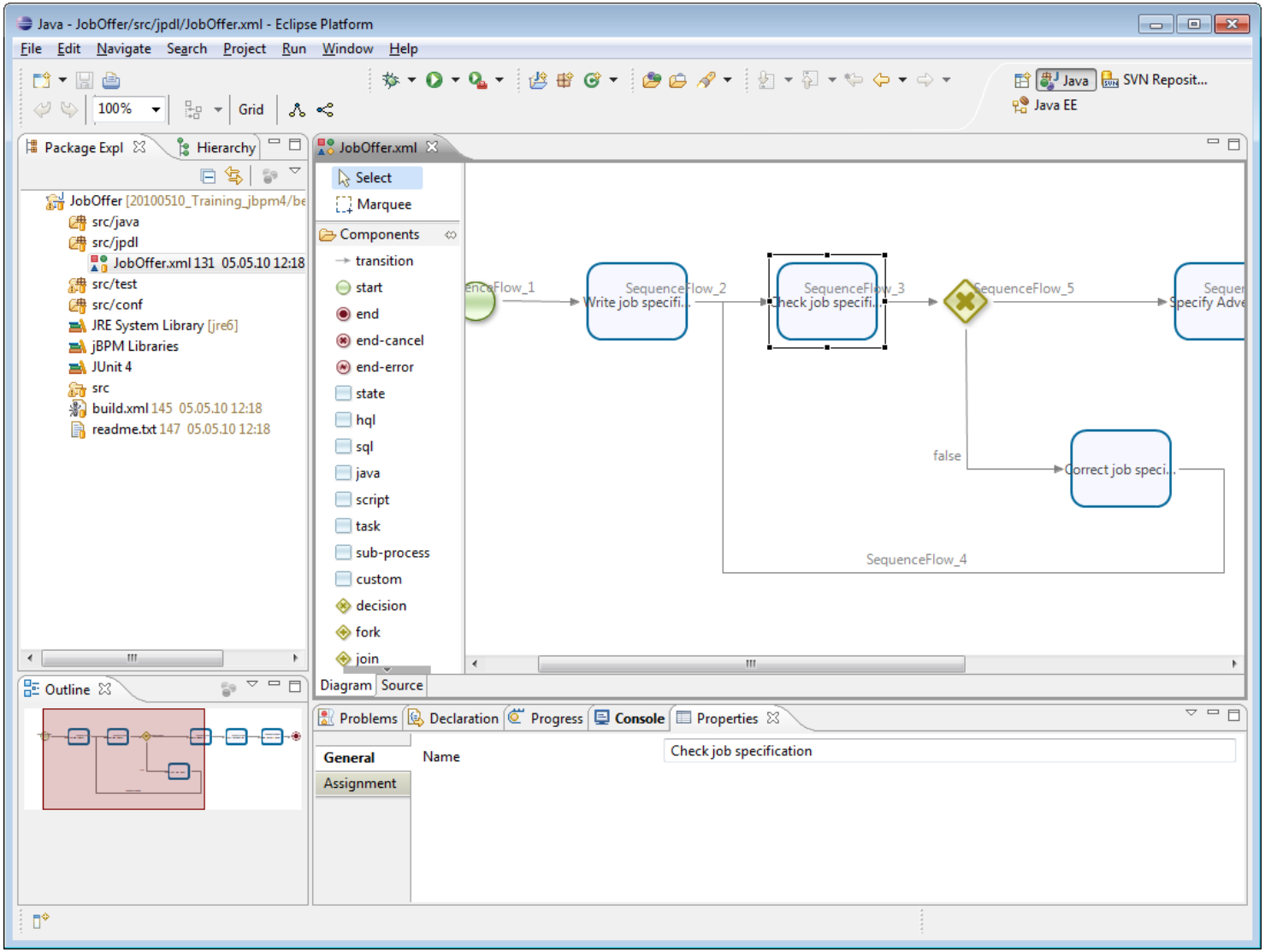
And work on process in Eclipse



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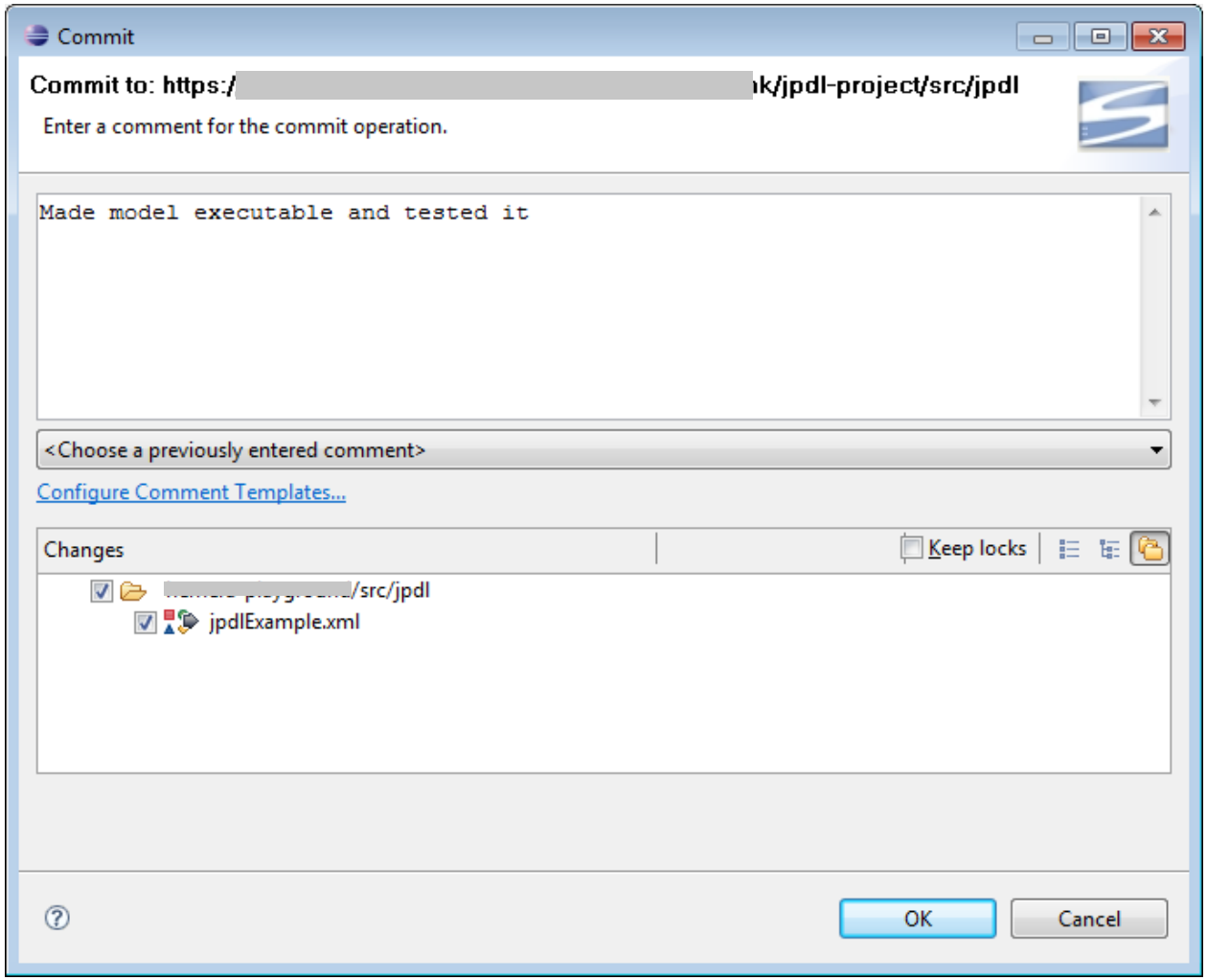
Commit changes



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Notification of changes

HEMERA JSF-GUI - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen Extras Hilfe

https:/[redacted]/

Google

HEMERA JSF-GUI

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Explorer | Process-Console | Task-Console | Settings

Hemera Repository Explorer

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    - 20100510 Training jBPM4
      - Bernd
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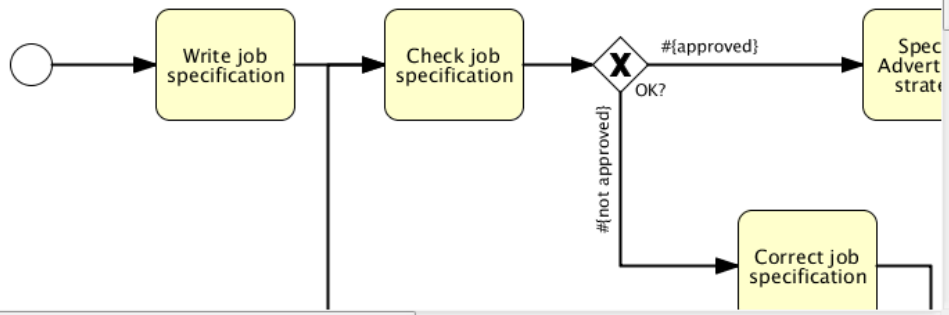
Visual Representation of Model



Suchen: Abwärts Aufwärts Hervorheben Groß-/Kleinschreibung

https://fox.camunda.com/jsf-gui/#

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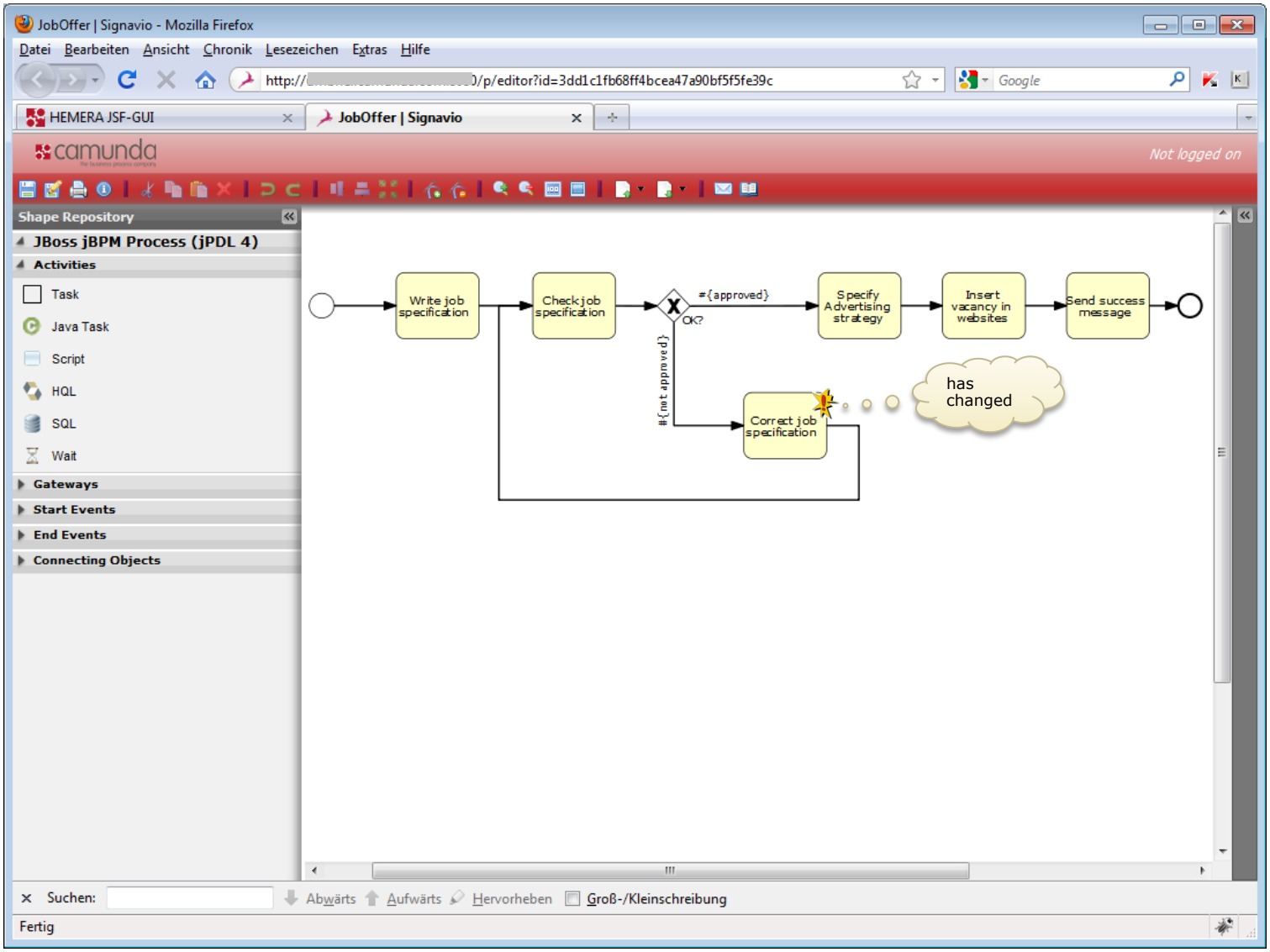
Merging or just approving changes in Signavio



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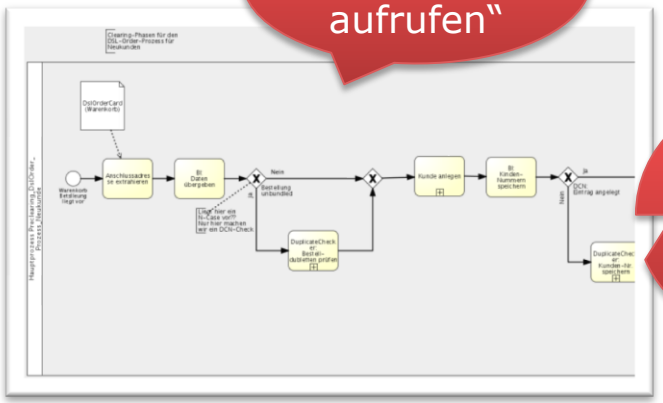
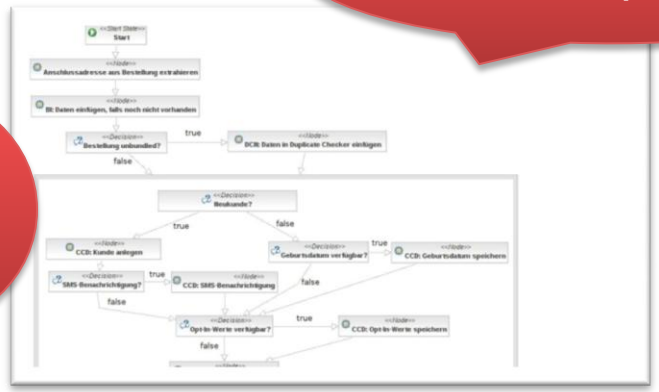
Ja, es existieren verschiedene Modellversionen – Na und?

„Fraud-Service aufrufen“

FraudService.
checkFraud(customer)





BPMN-Repository (Signavio)

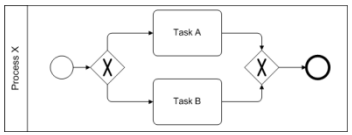
Entwicklungs-Repository (SVN)

Repository in Process Engine

Modell in der Entwicklung

Fachliches Modell

Ablaufendes Modell



Logisches Modell

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Und ist „Mapping“ eigentlich so schlecht?

HEMERA JSF-GUI - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen Extras Hilfe

Das geht...

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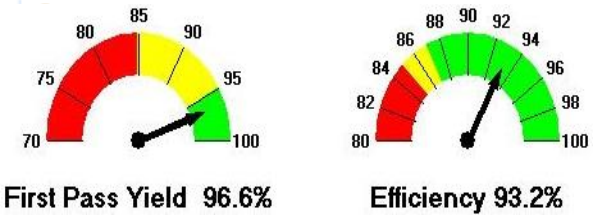
Explorer | Process-Console | Task-Console | **Settings**

Hemera Repository Explorer

- Root:
  - Signavio-ROOT
    - Conventions
    - 20100511 Workshop jBPM4
    - 20100510 Training jBPM4
    - Framework
    - core processes
      - fullfillment
        - order
          - Order (Signavio BPMN 2.0)
  - SVN-ROOT

Hemera Repository Explorer

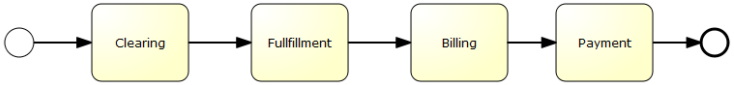


First Pass Yield 96.6%

Efficiency 93.2%

Hemera Details

Process Overview: Order



Process Versions

Type	Version	Resp.	Repository	Status	
Executable	14	Bernd	Activiti	phase-out	Activiti Explorer
Executable	15	Bernd	Activiti	deployed	Activiti Explorer
Executable	2243	Falko	SVN	development	Fisheye
BPMN BPD	5	Nils	Signavio	approved	Signavio Modeler
BPMN BPD	6	Nils	Signavio	revision	Signavio Modeler

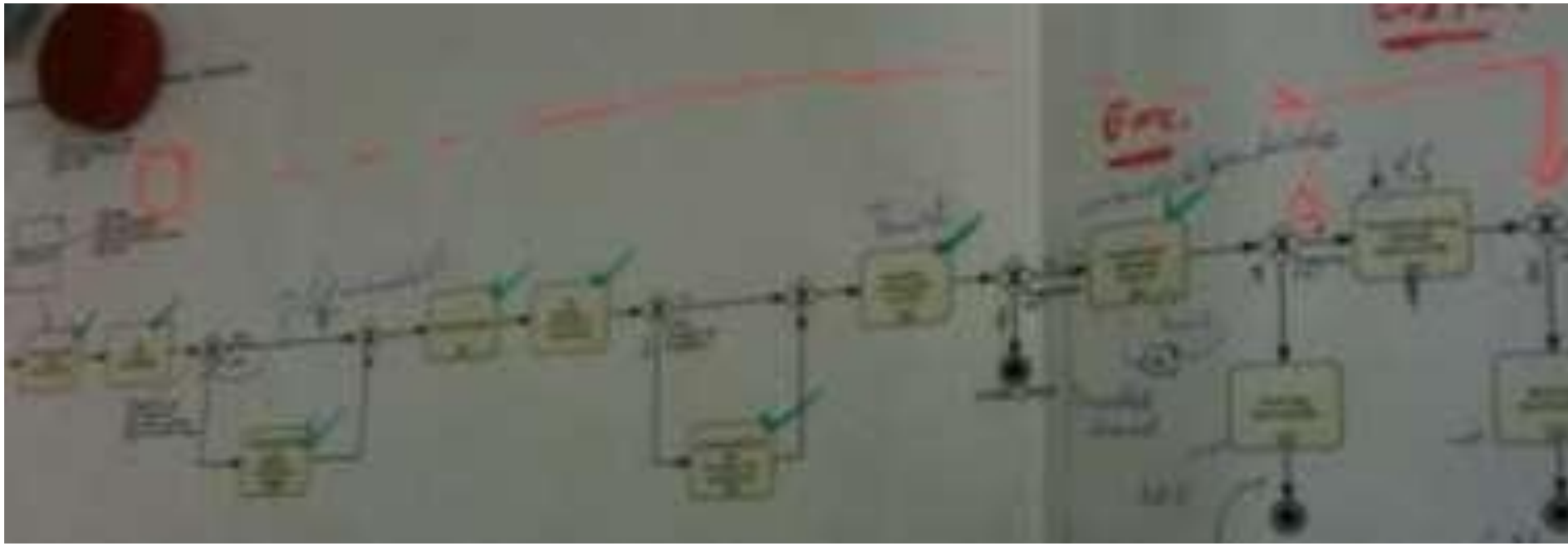
Jobs & Todos

Type	Resp.	Description	
Merging	Nils	Approved technical model raised conflict.	camunda fox merging tool
Dev	Falko	New business process modell approved, check	Signavio Modeler JIRA

Fertig

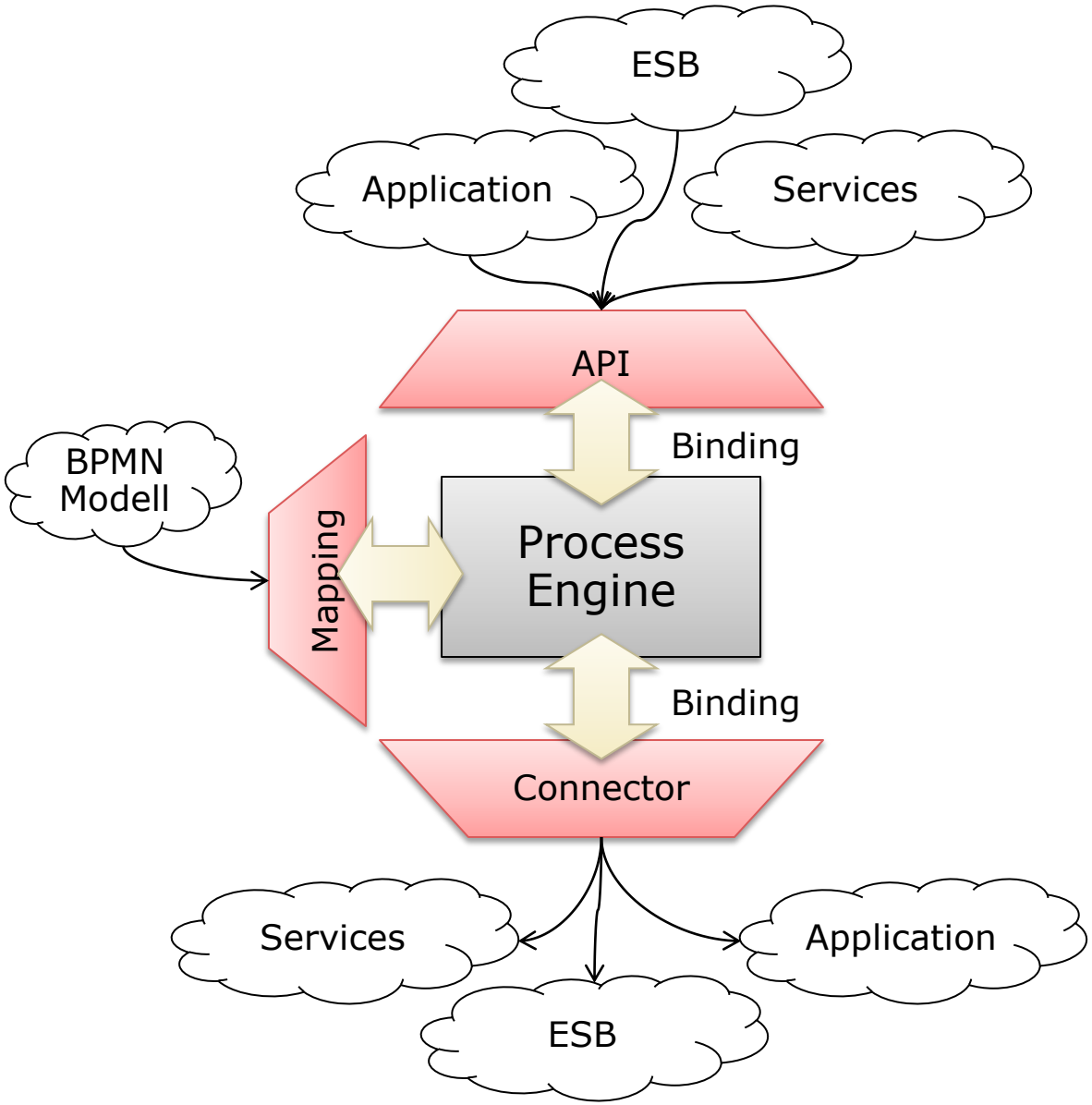
Da sind wir grade dran...

Auch das kann ich mir gut vorstellen...



Und aus aktuellem Anlass: Welche OSS Process Engine?

Mögliche Strategie: Process Engine Abstraction Layer



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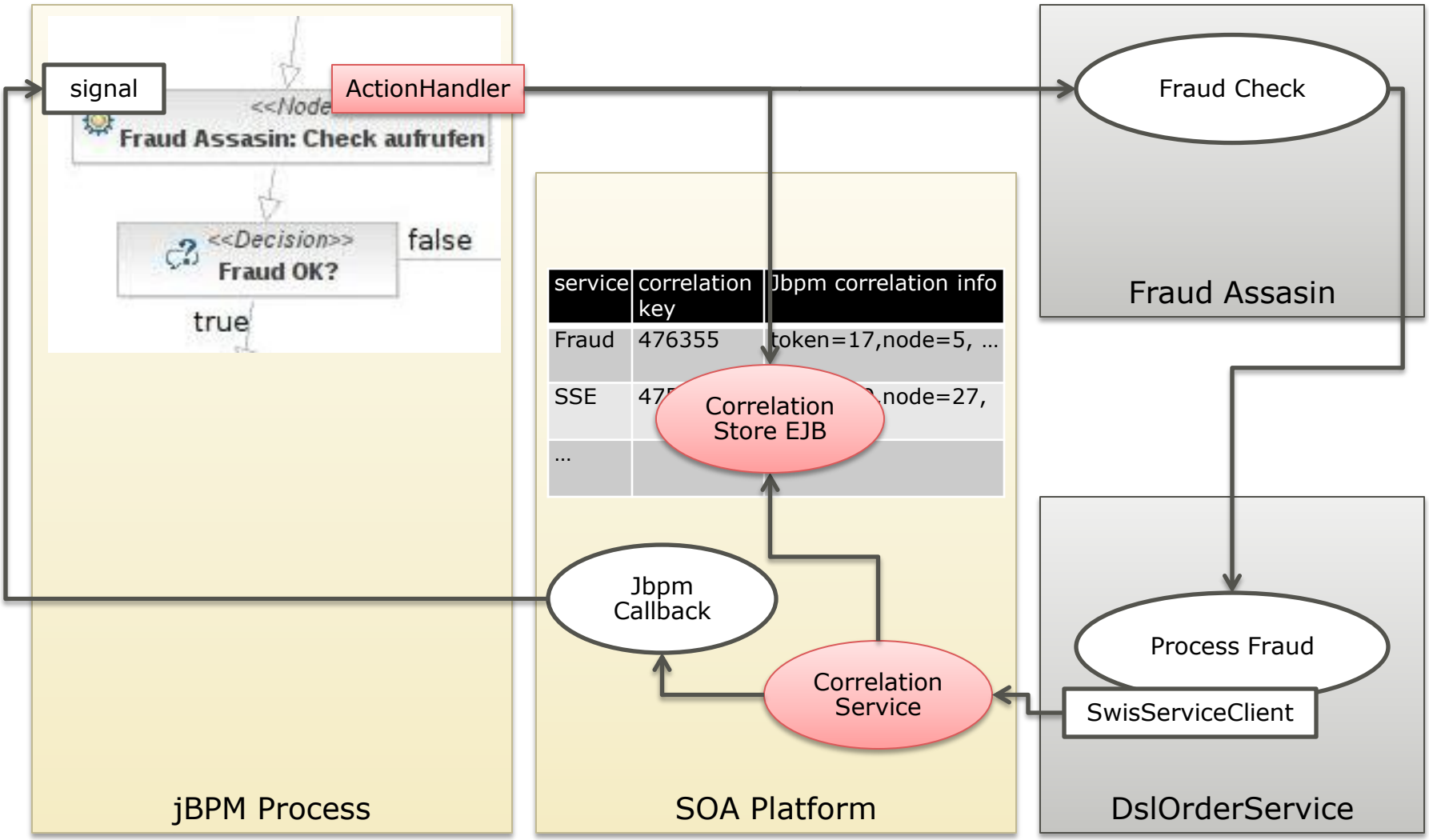
Plus eigene Korrelationsmechanismen...



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Alles interessant. Aber OSS. Zum Ausprobieren?

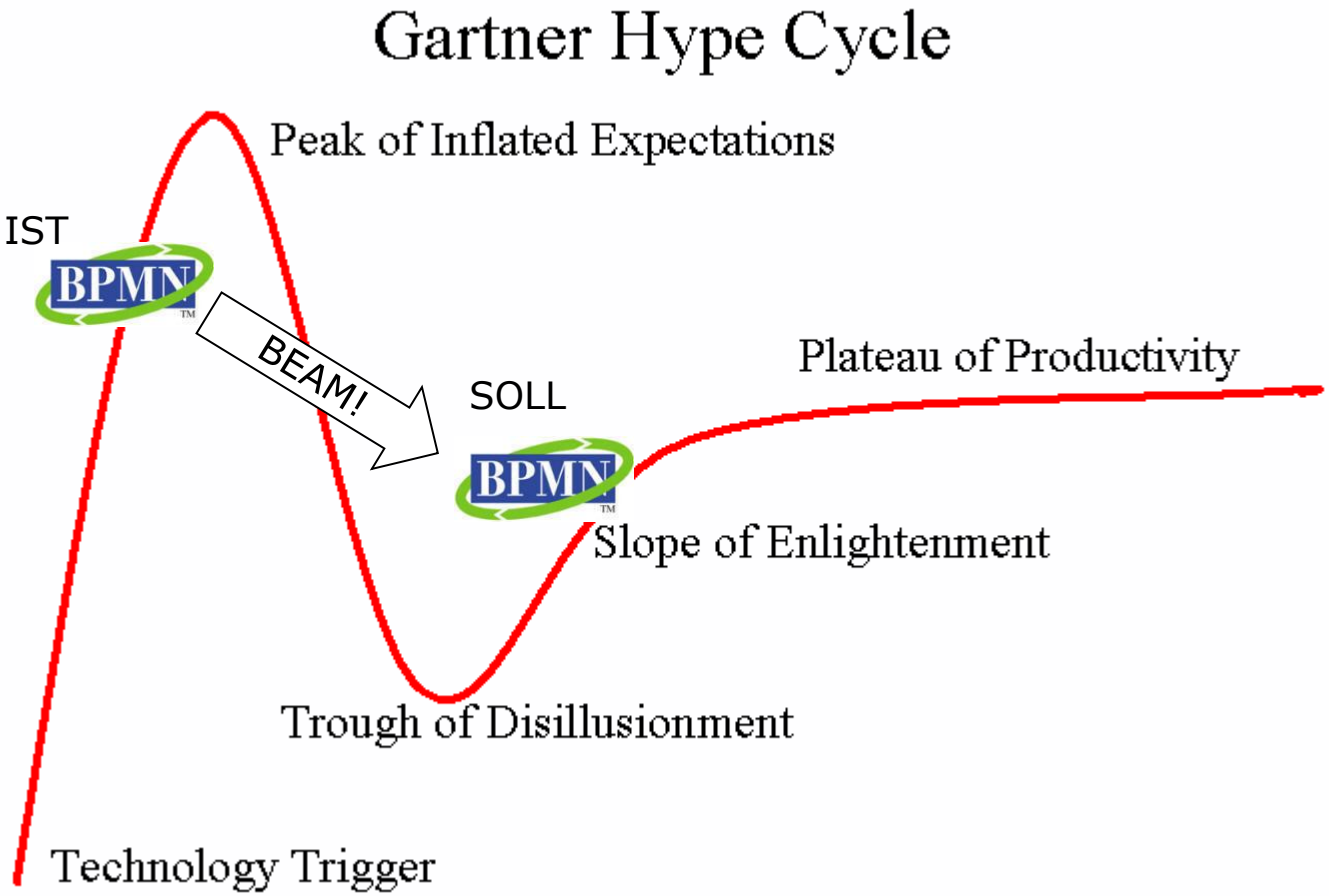
camunda fox
is coming!

Community Edition Version 1.0

August 2010

fox.camunda.com

Was wir gerade versuchen... Wer macht mit??



Also: Alles wird gut ☺

Bei Fragen:
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Vielen Dank!

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Entwicklertag

Karlsruhe, 24.06.2010

Der Praxis-Blog zu BPM:
www.bpm-guide.de